

THE VOCABULARY LEVEL OF STANDARD THREE AND FOUR
PUPILS OF KAKAMEGA DISTRICT.

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A thesis submitted to the University of Nairobi in part
fulfilment of the requirements for the degree of Master
of Education - 1978.

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DECLARATION

"This thesis is my original work and has not been presented for a degree in any other University".

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ACKNOWLEDGEMENTS

This kind of study cannot be successfully accomplished without the cooperation of many people. Therefore I am very grateful to all the people who in one way or another helped me with this study.

I am deeply indebted to Dr. Dobbyn of the Department of Educational Communications and Technology, University of Nairobi. His criticisms and suggestions were extremely useful in Examining the children's language in general and vocabulary in particular. His lectures inspired me to undertake research in this problem.

Many thanks go to Dr. W. Young for his patience in helping me to analyse the data collected.

To the Headmasters and Teachers of the Schools used for this study, I am very thankful for your cooperation.

Last but not least to Mr. Nyaboga, formerly the Deputy Provincial Education Officer, Western Province, and Mr. Simiyu, formerly the District Education Officer, Kakamega District for the help they gave me while I was conducting my research.

THE ABSTRACT

Prior to this study, there has been no research done in Kenya to determine the range of children's vocabulary in English at any given level, to enable the educators to choose or to write books of the correct level of difficulty based on empirical evidence from research. The aim of this study was to find out the approximate English reading vocabulary level of the standard three and four pupils of Kakamega District; and to compare this with the vocabulary level of their English class texts.

The Thorndike (1, 1944) word list was used to measure the pupil's vocabulary level. A pilot study revealed that the maximum vocabulary level encountered in any pupil was around two thousand words and this therefore was the range of words that was used for the final test 'C' (See Appendix A(iii)).

The results show that the majority of the pupils have a vocabulary level that is below one thousand words. It was also found that the nursery educational background had a positive effect on the boys, while it appears to have no significant effect on most groups of girls as far as vocabulary range was concerned. In fact, nursery educational background appears to have a negative effect on the urban girls.

When 'harder' words (arbitrarily defined as words beyond the commonest five hundred) were sampled from the three textbooks used by the two classes, it was found that fifty nine per cent of the four hundred and fifteen 'harder' words sampled for further analysis were beyond the two thousand word level. This shows that most of the pupils would understand less than half (forty one per cent) of the 'harder' vocabulary items in their class texts.

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CHAPTER ONE

1.1 Introduction

Language development determines to a great extent, how well a child will cope with the subject matter in any learning situation. For the majority of the Kenyan children, English is the second language. It is therefore important for the teachers and planners to know whether the children have mastered enough language to participate fully in the classroom activities. These activities include not only general classroom communication with each other and the teacher but also the ability to read and understand the class readers and textbooks.

Since ability to communicate in a language can be said to be dependent upon the individual's stock of vocabulary, this study aims at establishing the approximate vocabulary level of standard three and four pupils of Kakamega District. It has also attempted to compare the vocabulary level of the pupils under study and of the English books that they use.

1.2 Statement Of The Problem

Before any reading books are written, it is necessary for the writer to have some idea of the level of the intended reader.

Currently, we do not have any empirical evidence on the vocabulary level of the primary school children or of the English books that are in use. There is the assumption that the books that are produced by the Kenya Institute of Education are equally suitable for all children. Though it is difficult to write a book that is suitable for every child in the country, it is necessary to make sure that the books that are in use are suitable for the majority of the children.

The importance of the reading skill cannot be over-emphasised. Yet, it is common knowledge that there are many non-readers in our Primary Schools.

It is not uncommon to find an illiterate Certificate of Primary Education (C.P.E.) graduate. Others do not gain permanent literacy even after seven years of primary education. To most of the children, reading is a tool, useful only as long as it can aid them in their examinations. Therefore, when children leave formal educational system and there are no more examination hurdles to jump, they are no longer interested in reading. After some time, they become semi-literate or completely illiterate for all practical purposes. As already stated in 1.1 (page 1) above, this study has made a comparison between the vocabulary level of the standard three and four pupils and the English books that they use. Probably most children are unable to read or are uninterested in reading because the set books are too difficult for them.

1.3 Significance Of The Problem

This study will help us to estimate the standard three and four pupils' passive vocabulary and also the vocabulary range of the readers in use. It will also help us to establish the relationship, if any, between sex, class, environment, pre-school experience and vocabulary development.

After the vocabulary level of the pupils and the class readers is established, it is hoped that the study will provide suggestions that will help the Kenya Institute of Education in the writing of the class readers and books, and also provide suggestions that might help the Primary School teachers in their teaching methods. It will also help us conclude whether the readers in use are appropriate or not.

It must be admitted that in the event of books being found to have a higher vocabulary level than that of the pupils, we cannot be sure whether it is the level of the books that is higher or whether it is the pupils who have a lower vocabulary level than they should.

1.3.1 Curriculum Planning

It is important for the curriculum planners to know something about the students that they are planning for. The Kenya Institute of Education is currently the major source of reading materials for Kenya Primary Schools. The planners do not however know the pupils' range of vocabulary.

It was felt that this study would help them to have an idea of the vocabulary level of the pupils under study. Though one cannot generalize the findings of this study beyond Kakamega District, it is hoped that this study will enable the curriculum planners to see whether or not there is a discrepancy between the pupils' vocabulary and the vocabulary level of the books in use.

1.3.2 Pedagogical Importance

A study of this nature is expected not only to be of use to the curriculum planners but also to the teachers.

Pupils spend most of their waking hours in school, and the teachers are charged with the responsibility of helping the children to acquire language patterns that will help them to follow the subject matter in all the subjects and also to communicate freely.

Teachers should realize that language develops best in a free atmosphere where pupils are given enough chance to experiment with language. Pupils ought to be given enough opportunities to use the language and to read as much as possible. These opportunities help the pupils to increase their stock of words.

Since pupils' experiences differ greatly, the content of their vocabulary also differs. This study will help the teachers to find the kind of vocabulary problems that their pupils face. After identifying these problems, it is hoped that teachers will establish better and more effective ways of improving their pupils' vocabulary.

Most children's language usage centres around their common needs. Children tend to understand best those words that they use or come across most often. Teachers should offer wide opportunities to enable children to use language so that they can widen their vocabulary. They should help the children with simple interesting and varied materials so that the latter can gather more vocabulary through their reading.

1.4 Assumptions

Before selecting the sample and carrying out the study certain assumptions concerning the sample had been made.

1.4.1 Social Economic Status

It was decided that it would be difficult to find out the children's social economic status as the items to elicit the relevant responses would be difficult and too involved for the pupils to cope with. Interviews or home visits to see how the pupils lived would have been too financially and time involving and were beyond the researcher. The study was therefore carried out with the assumption that social economic status would not make a great difference to the findings of the study since even children with low social economic status, given the right opportunity would perform well in any given test. Likewise children with a high social economic status would perform poorly if they lack the opportunity.

1.4.2 Reading Ability

My tests basically involved the ability to read the questions and to choose the right response. I therefore worked on the assumption that all my sample could read.

This was something I could not control in such a random sample as I had for this study.

1.5 The Purpose Of The Study

The purpose of the study was :

- a) To estimate the pupils' passive vocabulary level.
- b) To estimate the relationship, if any, between sex, class, environment, pre-school experience and vocabulary development.
- c) To estimate the vocabulary range of the readers used by the standard three and four pupils.
- d) To provide suggestions which will help the K.I.E. in the writing of the class readers and books, and also to provide suggestions that might help the primary school teachers.
- e) From a,b,c and d, conclude whether or not the readers in use are appropriate.

1.6 Statement Of Hypotheses

Below is a list of hypotheses that I had set out to test in this study.

- 1.6.1 There is no significant difference between boys and girls.
- 1.6.2. There is no significant difference between standard three boys and standard four boys.
- 1.6.3 There is no significant difference between boys with nursery education and boys without nursery education.
- 1.6.4 There is no significant difference between rural boys with nursery education and rural boys without nursery education.
- 1.6.5 There is no significant difference between urban boys with nursery education and urban boys without it.
- 1.6.6 There is no significant difference between rural boys with nursery education and urban boys with nursery education.

- 1.6.7 There is no significant difference between boys with nursery education and girls with nursery education.
- 1.6.8 There is no significant difference between boys without nursery education and girls without nursery education.
- 1.6.9 There is no significant difference between standard three and four.
- 1.6.10 There is no significant difference between standard three girls and standard four girls.
- 1.6.11 There is no significant difference between rural and urban pupils.
- 1.6.12 There is no significant difference between pupils with nursery education and pupils without nursery education.
- 1.6.13 There is no significant difference between girls with nursery education and girls without nursery education.
- 1.6.14 There is no significant difference between rural girls with nursery education and rural girls without nursery education.
- 1.6.15 There is no significant difference between urban girls with nursery education and urban girls without nursery education.
- 1.6.16 There is no significant difference between standard three pupils with nursery education and standard three pupils without nursery education.
- 1.6.17 There is no significant difference between standard four pupils with nursery education and standard four pupils without nursery education.
- 1.6.18 There is no significant difference between standard three urban boys with nursery education and standard three urban boys without nursery education.

- 1.6.19 There is no significant difference between standard three rural boys with nursery education and standard three rural boys without nursery education.
- 1.6.20 There is no significant difference between standard four urban boys with nursery education and standard four urban boys without nursery education.
- 1.6.21 There is no significant difference between standard four rural boys with nursery education and standard four rural boys without nursery education.
- 1.6.22 There is no significant difference between standard three rural girls with nursery education and standard three rural girls without nursery education.
- 1.6.23 There is no significant difference between standard three urban girls with nursery education and standard three urban girls without nursery education.
- 1.6.24 There is no significant difference between standard four girls with nursery education and standard four urban girls without nursery education.
- 1.6.25 There is no significant difference between standard four rural girls with nursery education and standard four rural girls without nursery education.

1.7 Definitions Of Terms

There are two terms that require definition :

1.7.1 Passive and Active Vocabulary

An individual has different 'types' of vocabulary which basically fall under two categories, namely passive and active. Passive vocabulary is that which a pupil might be expected to recognize in print and know its meaning from context.

He may not necessarily use it in his speech or writing correctly. The selection of this type of vocabulary was made from Thorndike (1, 1944) since it is here that we have words listed according to their commonness. He has selected these words from a very wide range of children's general reading material.

Active vocabulary is more difficult to test as it involves those words that an individual recognizes in print and also uses them correctly in speech and writing. To test knowledge in 'active' vocabulary, one would need to engage pupils in a conversation and also to check some of their original compositions.

1.7.2 Difficult Words

When sampling words from the English books in use in the schools under study, my concern was with the difficult or 'harder' words. These were arbitrarily defined as words beyond the commonest five hundred according to the Thorndike (1, 1944) classification.

CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

2.1 Culture, Home-background and Social-Economic Status

The word 'vocabulary' is usually used to mean the child's speech, sentence length, choice of words and fluency.

A great deal has been written on the influence that culture, home background and social-economic status have on the development of language in general and on vocabulary in particular. Tidyman et al (2, 1959) rightly assert that a child's vocabulary and sentence structures reflect experiential background. Vocabulary development of the child in the early years is part of growing up. Nouns come first, then relational terms, qualifying terms and complex sentences come later. Vocabulary is determined by environment, life patterns and by influence of parents, teachers and peers. Words grow out of needs for meeting real life situations and vocabulary increases in range and complexity as experience becomes richer and more varied. This is so because words are a convenient medium for expression of thought and feelings. Usually, the more intelligent the child, the more words will be learned. However, the child must have the opportunity and experience. According to Strickland (3, 1957) a child with parents of low mentality will have a meagre vocabulary on entering school but may show ability to learn new concepts.

Vocabulary growth takes place best in natural conditions. Both Dawson (4, 1963) and Spache (5, 1964) say that the basis for early vocabulary learning is the children's first-hand experiences. Purposeless word study therefore can become artificial and removed from actual experience and may make little contribution to the children's expression. Dawson (4, 1963) further asserts that if poverty and ignorance prevail in the

child's environment and his experiences are limited, his fund of words will be low and scanty. Those with a wealth of experience, for example toys, books, pictures, playmates and great deal of opportunities to talk about these experiences will probably acquire a rich vocabulary. He isolates three major factors that affect vocabulary growth;

1. Intelligence or the capacity to learn, conditions what a child can learn from is environment. A child who is not observant and who is slow to learn might not have a wide vocabulary even if his environment has rich and varied experiences.

2. Interest also affects the child's acquisition of vocabulary. The child notices the objects and activities that interest him and ignores the obvious when it has no appeal to him.

3. Instruction and guidance is another factor that may affect the child's acquisition of vocabulary. Parents may or may not encourage the child's desire to learn and use new words. According to Strickland (3, 1957), both the child's native capacity and environment play a part in vocabulary development, but the child is dependent on opportunity and experience regardless of his capacity. Environment and experience have a greater influence since a child with a slow-learning mind may gain proportionally more vocabulary in a privileged environment than an above-average child in a seriously restricted environment.

Bernstein (5, 1961) describes the problem of exposure to separate and distinct patterns of language by children from extreme groups. Milner (7, 1951) found that children from permissive parents had greater language development than those with less permissive parents.

Spache (5, 1964) gives various factors that have an influence upon the child's reading vocabulary growth. He asserts that the school is not the only major influence upon the child's development of sight and meaning vocabulary. Rather, vocabulary development is dependent upon his auditory memory for words. If the child is limited

in verbal intelligence or in experience with words because of bi-lingualism, poor family or cultural background and narrow pre-school verbal experience, he will lack auditory background for acquiring adequate sight and meaning vocabulary. The intellectual interests of the family, and the level of its verbal inter-communications also condition the child's readiness for reading vocabulary growth. Play, reading interests, hobbies and pastimes also influence vocabulary development. Thus the basis for early vocabulary learning is the child's firsthand experiences.

According to Deutsch (8, 1972) it is the verbal engagement of the people who surround him which is the operative influence in the child's language development. As a rule there is little discussion in the lower socio-economic status families and hence the children pick up very little active vocabulary from home.

Hilderbrand (9, 1971) also agrees that stimulation from parents, siblings and playmates is extremely significant. Necessity to cope with more than one language appears to hamper the development of a child's skill in a single language. Since the child's first social environment is the family, his language is influenced by relationships within the family.

An individual's speaking vocabulary will differ from his reading and listening vocabulary. According to Anderson (10, 1964) and Spache (5, 1964) the culturally deprived child finds it more difficult to have the motivation to learn because he lacks the particular experience and because he is at a relatively low level of linguistic development.

The development of children's vocabulary involves more than simply teaching them what words mean. Petty (11, 1973) says that everyone's vocabulary has come from his living and from all the things that he has done that involve language.

2.2 School Environment

One of the most difficult and yet important phases of language teaching is the teaching of vocabulary, and developing word meaning is one of the teacher's most important tasks. Dechant (12, 1964).

For most teachers, choice of vocabulary is pre-determined by the textbook selected. Words may be listed and taught on the basis of frequency; that is the number of times they appear in the average reading material likely to be used by certain age groups or available in a number of schools. The pupils may increase their passive vocabulary by learning these words a few at a time, and this facilitates reading. Meras (13, 1962) explains various ways in which the school through the teacher can help a child develop his vocabulary. He says that direct method, for instance where the teachers use the objects in the class, is one of the ways that this can be accomplished. The teacher can also repeat a new word in a variety of ways so that the pupil will learn it easier. New words should be presented at the beginning of the lesson or as footnotes listing words which will be used in later written or oral composition. Children should also list difficult words after every reading lesson so that they can build their own dictionaries. He also says that words with opposite meanings used in the same sentences often facilitate retention of vocabulary without the intervention of the native tongue.

Hilderbrand (9, 1971) isolates ways in which the teacher can foster the child's language development. The teacher must provide a relaxed atmosphere that encourages pupils to talk freely with everyone. They should be encouraged to exchange ideas, share information and ask questions. This is because a pupil must learn that he has views of his own, and the only way he can learn this is by being permitted to express them. Here he agrees with Mckee (14, 1939).

The teacher must give each pupil time to talk. He is the model for pupils' speech. As such, he should speak clearly and correctly, using words, gestures and examples to help the children's understanding. He should seek out the quiet children and make them feel at ease. He should take personal interest in all the pupils.

Every teacher must capitalize on every opportunity to extend the children's vocabulary. He should help them to increase their ability to make sentences or to explain events in a sequence. Children learn more if they are personally involved in activities and talk freely about these activities.

The teacher should avoid putting too many ideas in a single sentences. He must plan a variety of activities to interest the children. He should correct wrong pronunciation immediately.

The tasks of teaching are to provide children with a rich variety of learning experience and to help them to acquire the words they need to use in connection with those experiences. According to Strickland (3, 1957) children need opportunities to talk about what they read, in their own words so that the teacher may know what they are thinking concerning any particular word as they read. He will find out to what extent they understand the contextual meaning.

The basis for word study is in expanding experiences and in a growing desire for clear vivid expressive words: Tidyman (2, 1959). Language development is characterized by growth in range, variety and selectivity in the use of words. Words must be viewed as tools for clarification of thinking, otherwise word study becomes mechanical and may result in words used without understanding. He also believes that single words unduly analysed out of context

and spoken as a unit lose their normal sound and this may result in 'word-calling' hampering reading progress. Hence, the feeling for the fitness of words in context is the positive side of usage instruction, the side which should receive much more attention than has been given it. The teacher's job is to explore the child's language background, to broaden and deepen experience and to help him develop new words and linguistic patterns with which to deal with new ideas.

To develop vocabulary is to train children to observe, interpret experience, nuance and mood and to find words that explain what they think and feel. Since words are a means of clarifying and expressing ideas and feelings, they should grow out of real vivid experiences and the desire to put them into words. Vocabulary growth therefore takes place best in natural situation in which there is a thought or a feeling requiring definition and expression. Word-study - filling blanks, antonyms, synonyms, or defining words may become so artificial and removed from actual situations that they will make little permanent contribution to children's thinking and expression. The teacher should help the pupils to see the immediate need to substitute definite words for vague expressions.

Words that refer to concrete objects and activities take on rich meanings. Children vary in the rates at which they acquire vocabulary. Some need clarification and correction of relatively simple words, while others need help only in areas of obtuse and advanced meanings Dawson (4, 1963). Teachers therefore need to identify the needs of various pupils.

Smith (15, 1963) says that the growth area of word identification is the most basic of all the skill areas. It is the foundation upon which the skill in all other growth areas is laid. Unless the child can recognize the words for which the printed symbols stand, he cannot read.

Spache (5, 1964) believes that understanding of words does not transfer readily from one language skill to another. A child does not easily write new words he has learned from listening or reading. Pupils depend on commonplace conversation terms rather than on the more precise words they learn from reading or listening. Therefore class practices which assume that vocabulary is a unitary trait or that a pupil will use in speech or in writing the words he is taught by certain reading exercises fail to accomplish their purposes. It is unrealistic to attempt to teach the child to write or spell most of the words he learns in reading or listening or to use these in speech. It is essential that the school environment provides the pupils with audio visual aids, word games and library facilities so that the pupils will be able to talk about these experiences. Workbooks, dictionaries, varied exercises in manipulating word meaning make a small contribution to the growth of meaning vocabulary. This is because they have less effect than the cultural and socio-economic backgrounds. Spache feels that the presentation of new words through word cards is superficial because it lacks multisensory response. It is pointless unless children already know the words from auditory first hand experience. Direct teaching of vocabulary produce superior results. Here he agrees with Dechant (12, 1964).

Schools should reshape their curriculum and methods, to begin with what the child knows, otherwise learning cannot proceed in a fruitful and meaningful way. Anderson (10, 1964).

McKee (14, 1937) also states six ways in which the school can help the pupil to develop his vocabulary. He feels that rich and meaningful experiences should be provided as well as the use of audio-visual aids. Pupils should also be given opportunity for informal discussion, for the exchange of experiences and ideas and for questioning. The teacher should explain any new and partially formed concepts. He should also help the children to feel dissatisfied with lack of ability to express themselves with precise meaning in the situation they encounter and encourage them to ask questions on such. Oral reading and story telling should also be encouraged. Vocabulary items must always be taught in context because it is the context that controls meaning Fries (16, 1945).

Bright (17, 1970) says that materials should be carefully graded. To help the pupils comprehend what they read, the vocabulary must be controlled and selected at the right level. If the materials are too easy, the pupils become bored; if too difficult, they get disheartened and are forced into mistakes. The teacher can try to find out how many words the children know, whether these are the words that they need to know, and how he can help them to learn new words. According to Bright, the words which the pupils 'know' are not necessarily those which they can define. They 'know' words in a passive sense, that is they can recognise them easily but cannot use them with confidence. These are the words that are contained in sight word lists selected from written materials for example Thorndike (1, 1944). These wordlists represent the words which a beginning reader will encounter most often in his reading: Chester and Otto (18, 1974).

2.3 Sex Differences

Burroughs (19, 1958) reports an experiment on sex differences in the vocabulary of young

children. He used one hundred and sixty five boys and one hundred and sixty five girls of ages five to six and the number of children using each word was determined. The average number of words used by boys and girls were two hundred and thirty eight and two hundred and forty eight respectively. The results showed no significant difference. Different words were used significantly more by different sexes and this could indicate factors which influence vocabulary development; that is environment, mental growth and interest. The latter is a particularly important factor since boys have different interests from girls. There was no evidence that girls are better in vocabulary ability than boys. Boys used significantly more words in energetic outgoing activities and practical interests. It was also found that girls are inexact in the labelling of creatures and things. For example they would refer to birds whereas the boys would be more exact and use words such as sparrow or eagle.

Templin (20, 1957) found that the estimated vocabulary of boys is consistently higher than that of girls, though not statistically significant. The only difference was in articulation. Boys attain adult articulation one year later than girls.

Spache (5, 1964) says that although they tend to lag behind girls, boys' vocabulary shows distinct breadth in their areas of interest such as sports and science. Girls tend to show greater overall development in vocabulary and less tendency to excel in specific areas of high interest. The freedom to explore, to be curious, to question and discover, determine ultimately the breadth and depth of this development or by their absence stifle and restrict it. Thus it might be possible that any sex differences obtained in a vocabulary test would have been caused

by cultural factors. since in most societies boys are allowed more freedom to explore and discover than girls.

2.4 Communication

Words are an essential means of communication and learning in school : Gulliford (21, 1959). Though emphasis is placed on concrete experience and audio visual aids, the teaching of words cannot be avoided altogether. A widening vocabulary and a greater command of the mother tongue are both evidence of and means to intellectual growth. Words are a factor influencing mental activity, help develop concepts and create new forms of attention, memory, imagination, thought and action. Language provides the child not only with words to sum up his observation of the world but also the words are tools which enable him to attend to more features of his world on a more precise and analytic way. No genuine enlargement of vocabulary can come about except through an enlargement of understanding.

Carrol (22, 1953) believes that children can only acquire a language as a means of communication when it is directly linked with their thinking.

Language at its basic level is used for communication. At a higher level, it may be used to convey or evoke emotions, suggest attitudes and invoke interest: Morris (23, 1967). Burns (24, 1973) says that with words, children not only express themselves better, but they observe more accurately, think more clearly, comprehend more deeply, relate to others more effectively and understand themselves better.

Specific meanings of words must be widely accepted in order that verbal messages can pass from one person to others. According to Trauger (25, 1963) words themselves have no clear cut definitions.

A word must be part of a sentence in order to have its meaning made clear. As Laird (26, 1959) says

" words have no fixed meanings, they have the power of designating referents and of stimulating awareness of meaning in individuals", quoted by Trauger (25, 1963).

Lado (27, 1964) says that two thousand words is the approximate minimum for purposes of basic communication. Words are a necessary tool for expressing human experience. An expanding store of knowledge requires an expanding store of words. As the mind develops, the vocabulary develops too. Everyday a child picks up new words from his social surroundings. The rate of assimilation depends partly on the child's native ability and partly on the wealth of words with which he is surrounded.

Tidyman (2, 1959), Gulliford (21, 1959), and Deutsch (8, 1972), all agree that the acquisition of vocabulary with which to satisfy the daily needs of communication is one of the child's basic language needs, since words are tools for clarification of thought.

The question of whether the acquisition of an extensive vocabulary is one of the most important aspect of foreign language learning if one is to speak fluently has been posed by Rivers (28, 1968). She feels that in teaching a foreign language, unknown words should not coincide with new and difficult structures.

Social development is fostered when children have language skills. Language encourages a child to make social contacts, lead others in activities and organize the operative play. Hilderbrand (9, 1971) feels that since the child's first social environment is the family, his use of language as

an effective means of communication is influenced by relationships within family.

Deutsch (8, 1972) feels that if language cannot be used as a means of improving communication, schools lose much of their socializing role. Teachers should motivate pupils well enough so that they can communicate freely in the new language which they learn in school, since the best way to teach the child a foreign language is by letting him use it. Teachers should motivate pupils well enough so that they can communicate freely in the new language which they learn in school, since the best way to teach the child a foreign language is by letting him use it. Teachers need to allow the children to speak 'much' before they can expect them to speak 'well' : Ballard (29, 1964).

CHAPTER THREEThe Pilot Study

The purpose of the Pilot Study was to establish the approximate vocabulary level of the pupils to be tested in the final study, and also the appropriateness of the test procedures.

Three pilot tests A, B and C were conducted. The first test (A) conducted in November 1976 had to be discarded because it was found that the items used for the test were not representative. The words to be used for test B were from Thorndike (1, 1944). Since it was not known exactly how many words the pupils would know, we decided to use words sampled in stages from the first commonest four thousand words. These are classified by Thorndike and twenty five words, were randomly selected from each group of one thousand words; the first, second third and fourth commonest thousand.

The pupils used for this Pilot Study were the standard three and four pupils of Kakamega District. Four schools were randomly selected, two of these being within the Municipality and two being within the rural area. However, before the test was administered to these pupils, it was given to a smaller group of twelve pupils, randomly selected, to find out whether the pupils understood the questions being asked.

After scoring this test, it was found that the percentage of items not understood was not so great as to necessitate a major revision of the test. It was found that the pupils understood ninety seven percent of the items.

The same test was therefore administered to a larger group of pupils (forty eight). The sampling

of pupils was done randomly using the class registers. Since all the schools were double streamed one class was randomly selected. It was felt that having any one class would not affect the results since none of the schools had any classes streamed according to ability. Six boys and six girls were picked from the class registers in each of the four schools chosen for Test B giving a total of forty-eight pupils. The results are shown in Table 1.

TABLE I

The representative scores obtained by the four schools used for Test B

		Means	S.D.
First 25 questions	Matende	8.46	10.60
	Mahiakalo	11.41	9.29
	Kakunga	12.34	6.55
	Keveye	18.52	10.60
Second 25 questions	Matende	14.35	16.38
	Mahiakalo	10.78	14.96
	Kakunga	10.02	12.80
	Keveye	3.41	5.98
Third 25 questions	Matende	8.60	9.67
	Mahiakalo	9.45	15.90
	Kakunga	5.75	6.66
	Keveye	11.01	10.06
Fourth 25 questions	Matende	1.89	5.39
	Mahiakalo	15.44	13.70
	Kakunga	5.59	5.77
	Keveye	1.93	4.07

After scoring this test, it was found that the percentage of items not understood by pupils in all the schools ranged from only one to five percent. The test was marked in quartiles since twenty five words were selected from each succeeding group of one thousand words.

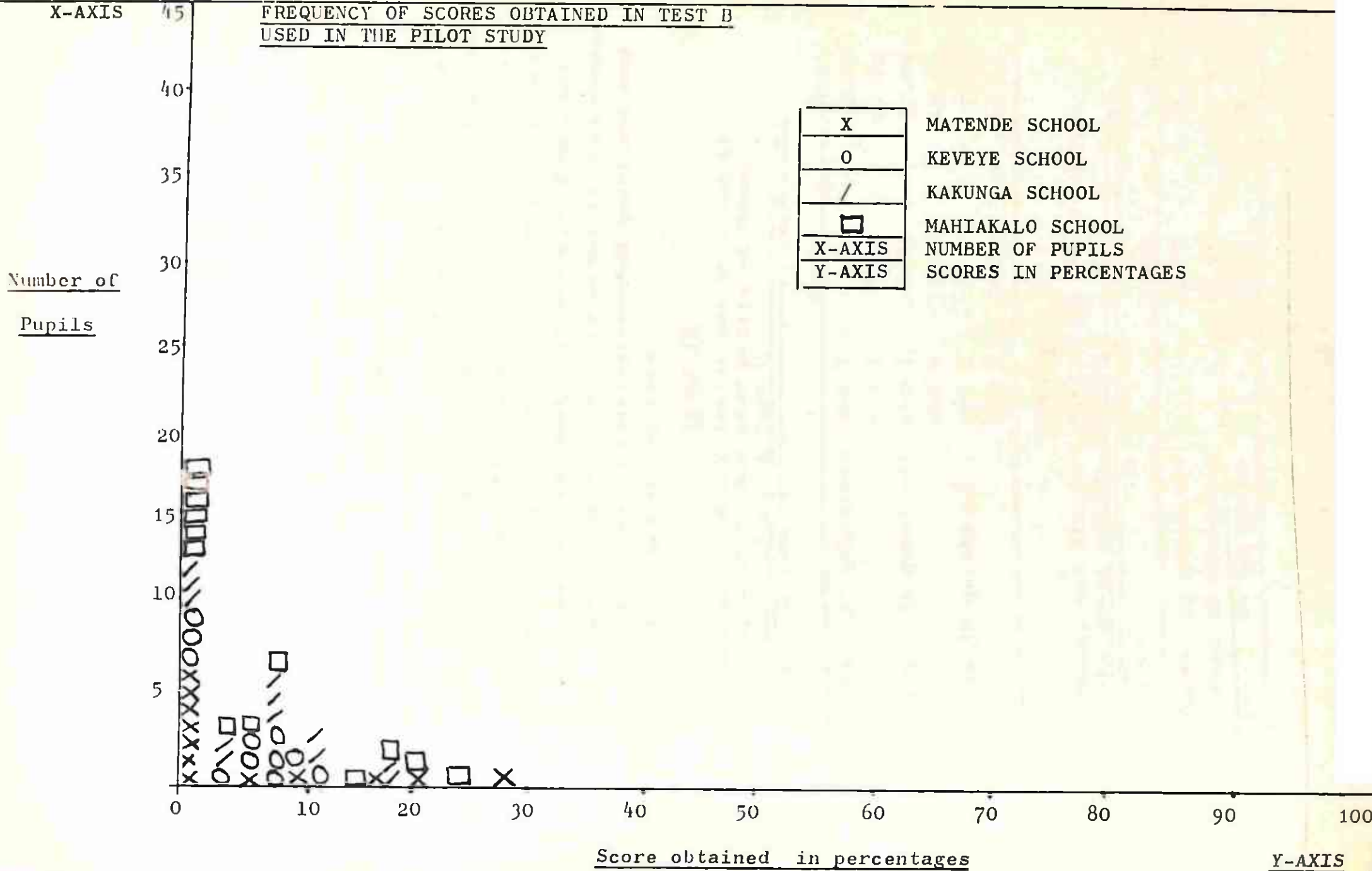
Figure I shows the frequency of scores obtained in Test B of the Pilot Study. From the graph it is evident that no pupil got more than twenty eight percent, with only one pupil getting eight per cent. It was also evident that no pupil knew the meaning of the words in the third and fourth quartiles (representing the third and fourth commonest one thousand words respectively). This was an important factor in the selection of the words to be used in the final test. Forty seven pupils (ninety seven percent) scored up to twenty five percent. It was tentatively assumed therefore that most pupils in standard three and four had a vocabulary level of about one thousand words. However, it was felt that since a bigger sample would be used for the final test, it would be wise to cater for the exceptionally bright pupils should such be found in the sample used. Hence part of the test would include words sampled from the second commonest one thousand words. Another observation was made; namely that it would be useful to include prepositions and that questions on prepositions would be presented pictorially.

The final test (C) was therefore designed so as to consist of one hundred items as follows. The first twenty five items would be chosen so as to test the pupils' understanding of the commonest five hundred words. The second twenty five items would test their understanding of the second commonest five hundred words, and the last fifty questions tested their understanding of the second commonest thousand words.

Test C was pre-tested on thirty two pupils. The sampling procedure was a stratified random one, that is with respect to choice of school, choice of class and choice of pupils. The test was marked in blocks of twenty five, twenty five and fifty;

FIGURE I

FREQUENCY OF SCORES OBTAINED IN TEST B
USED IN THE PILOT STUDY



because these represented the vocabulary level of the commonest five hundred words, second commonest five hundred words and the second commonest one thousand words respectively. The results for standard three and four are shown in Table II. The means and standard deviations for the whole group are shown in Table III.

After marking the test the reliability was calculated using Person's Product Moment and Spearman-Brown Formula for correcting split half correlation coefficient. The test was found to have a reliability of 0.96. No items were changed for the final test. It was, however, felt that the instructions should be given not only in English but also in Luhya and Kiswahili so that there would be maximum understanding. It was also found out that most pupils would require about fifteen minutes to answer the pictorially-presented questions and one hour to answer the rest.

TABLE II

Means and standard deviations obtained by standard three and four pupils of Ndani Primary School in Test C

			Means	S.D.
First	25 questions	std 3	12.12	13.45
		std 4	38.75	22.72
Second	25 questions	std 3	9.75	17.06
		std 4	32.06	19.90
Last	50 questions	std 3	4.43	7.07
		std 4	11.50	10.05

TABLE III

Means and standard deviations obtained for the whole sample in Test C

		Means	S.D.
First	25 questions	25.43	25.13
Second	25 questions	20.90	19.58
Last	50 questions	7.96	9.59

CHAPTER FOUR4. RESEARCH DESIGN4.1 Population and sampling

The population of interest was all the standard three and four pupils of Kakamega District. However, owing to time and financial limitations, it was impossible to use the whole population. It was therefore, decided that a stratified random sample would be selected for the study.

A list of schools was obtained from the Education Officer. From this list, five schools within the Municipality were randomly selected. The remaining five schools which were to represent the rural area were also randomly selected from different divisions. Thus there were in all, ten schools, five from the urban and five from the rural area.

The selection of pupils was a stratified random one. First, the classes were randomly selected since all the schools were double streamed. Class registers for the classes which were selected were used so that the required number of pupils would be selected. Five boys and five girls were selected from each class. This gave a total of two hundred subjects.

4.2 The Instruments

Thorndike's (1,1944), was used to provide the words that would be used in the tests. A pilot study had already been conducted to find out the suitability and reliability of the items to be used. The pilot test had a reliability of 0.96.

The test was in multiple-choice form, and the stem of the question was made as short as possible. It was arranged in order of difficulty the first twenty five questions were testing understanding of the commonest five hundred words in Thorndike's word list. The next twenty five questions were testing

understanding of the second commonest five hundred words and the last fifty questions were testing understanding of the second commonest thousand words. In all, there were one hundred questions. The first six questions were presented pictorially. These six questions were testing understanding of prepositions.

4.3 Test Administration

In all the schools the test was administered in an ordinary classroom atmosphere. Since the standard three pupils go to school only in the mornings, all the tests were conducted in the morning. It was also felt that it would be administratively more convenient and less disturbing to the general routine of the schools if standard three and four pupils were seated together in the same room since they were doing the same test. This also helped to save time since it was not necessary to go to the same school twice to administer the same test.

The pictorially-presented part of the test was administered first and the pupils were allowed fifteen minutes to do it. When they finished this, they were given the second part of the test which had similar instructions. They were allowed one hour to do this. The amount of time required had been determined during the pilot study. Though the instructions were written on the question papers, it was necessary to read them to the pupils. From the Pilot Study it had been found that it would be necessary to give these instructions not only in English but also in Kiswahili and Luhya. These three languages would, between them, reach all the pupils.

The teachers in these schools were not allowed

to stay in the classrooms after the pupils had commenced answering the questions. This was because it was felt that the pupils might be affected by the presence of their teacher walking around the class seeing what answers they were giving. However, since the researcher could not speak Luhya, it was necessary to ask the teachers to give the instructions in Luhya and then leave the class.

Pupils were asked not to write down their names but only their class, sex, nursery educational background, and the names of their schools. This, it was felt, would encourage the subjects to give honest answers without worrying whether their teachers would see their scripts. They were also told not to guess and that those who guessed would be penalized.

4.4 Scoring of Tests and Statistical Procedures

The test was scored in blocks of twenty five, twenty five and fifty. This was because these blocks represented words selected from the different word levels in Thorndike's worldlist. It was noted how many items the candidate got right, how many they got wrong, and how many they omitted. After this, a formula for correcting guessing was applied. This formula reads

$$\text{Score} = \text{Number right} - \frac{\text{Number wrong}}{\text{Number of distractors}}$$

This formula was used to avoid having pupils scoring highly who had obtained high marks by pure chance.

It is accepted that those who did not guess are unduly penalized. There is however, no general agreement among statisticians how the problem can be resolved. It was thought necessary to use the formula because if a test consists of three-choice items, scores

obtained by chance might run to 33% and appear to be fairly significant.

If the corrected score happened to be below zero, the candidate was given a score of zero. The percentages for each block of the test were then calculated so that a true picture of the range of marks obtained by each pupil on all the three sections of the test would be obtained.

CHAPTER FIVEANALYSIS OF DATA5.1 Level Of Significance

The means and standard deviations were calculated for all the subgroups which were under comparison. The t-test was applied to the different pairs of means to find out if there were any significant differences. The level of significance used was 0.05. Hypotheses were therefore accepted or rejected on the 95% confidence level.

5.2 Data For All Schools

The means and standard deviations for all the schools were calculated. Kakamega Primary School had the highest mean score in all the three sections of the test. The results are shown in Table IV below.

TABLE IV

Representative Scores Obtained By All Pupils in the Vocabulary Test

	Means	S D
First 25 Questions: Maraba	47.30	35.05
Musaa	19.15	25.21
Kakamega	63.60	32.53
Mwiyala	40.40	31.60
Bukhulunya	29.20	27.39
Munzatsi	34.60	27.11
Kakoyi	31.25	33.23
Shikoti	22.30	21.50
Chandumba	35.75	27.58
Mumias	53.85	29.34

Second 25 Questions:	Maraba	33.00	22.84
	Musaa	18.30	21.87
	Kakamega	39.95	28.21
	Mwiyala	26.90	21.22
	Bukhulunya	17.85	18.67
	Munzatsi	17.40	16.42
	Kakoyi	27.70	24.57
	Shikoti	12.20	17.26
	Chandumba	26.85	21.13
	Mumias	39.00	22.28
<hr/>			
Last 50 Questions:	Maraba	18.40	12.72
	Musaa	11.65	11.42
	Kakamega	26.55	22.11
	Mwiyala	10.45	12.15
	Bukhulunya	9.35	7.95
	Munzatsi	9.90	12.72
	Kakoyi	10.85	12.84
	Shikoti	6.15	8.96
	Chandumba	9.95	10.24
	Mumias	26.50	20.25

Different groups were later compared and these results are shown in the rest of the chapter.

5.2.1 Boys Versus Girls

The means, and the values of t are shown in Table V.

TABLE V
Sex Differences In The Vocabulary Test

		Means	t	Significant at $p = .05$
First 25 Questions:	Boys	42.43	1.97	
	Girls	33.74		
Second 25 Questions:	Boys	25.74	0.06	N.S.
	Girls	25.95		
Last 50 Questions:	Boys	14.03	0.31	N.S.
	Girls	13.32		

From the figures obtained, it can be seen that the mean score for the boys is higher on the first and last sections of the test. The t-value shows that the only significant difference between the two groups is in the first twenty five questions where boys performed significantly better than the girls. There is, however, no significant difference between the two groups in the second and last sections of the test.

5.2.2 Standard Three Boys Versus Standard Four Boys

It was decided that the groups should be subdivided further so that the hypotheses could be more deeply tested. The means and t-values were calculated and the results are shown in Table VI.

TABLE VI

Differences Between Standard Three and Four Boys

		Means	t	Significant at p .05
First 25 Questions:	Std.3	22.66	4.96	
	Std.4	62.20		
Second 25 Questions:	Std.3	12.60	3.83	
	Std.4	38.88		
Last 50 Questions:	Std.3	9.70	3.23	
	Std.4	29.20		

The values of t for all the three sections of the test indicate that there was a significant difference between the two groups in the whole test, with standard four boys emerging significantly better than standard three boys.

5.2.3 Boys With Nursery Education Versus Boys Without It

Table VII shows differences between the boys with and without Nursery Education (N.E.).

The group was subdivided again so that any differences caused by Pre-primary Education background could be tested.

The boys with nursery education had means which were roughly twice as large as those for boys without nursery education. The obtained t-values showed a significant difference between the two groups in the whole test. The boys with nursery education were significantly better than the boys without nursery education. The results are shown in Table VII.

TABLE VII

Differences Between Boys With and Without Nursery Education

		Means	t	Significant at p .05
First 25 Questions:	With N.E.	54.39	5.35	
	Without N.E.	27.20		
Second 25 Questions:	With N.E.	33.19	3.92	
	Without N.E.	16.22		
Last 50 Questions:	With N.E.	19.83	3.29	
	Without N.E.	8.90		

5.2.4 Rural Boys With Nursery Education Versus Rural Boys Without Nursery Education

The values for the means and t were calculated. It was found that though the rural boys with nursery education had a higher mean in all the three sections of the test, the differences were not statistically significant. Table VIII shows the results.

TABLE VIII

Differences Between Rural Boys With and Without Nursery Education

		Means	t	Significant at p .05
First 25 Questions:	With N.E.	42.04	0.98	N.S.
	Without N.E.	33.39		
Second 25 Questions:	With N.E.	28.40	0.30	N.S.
	Without N.E.	26.31		
Last 50 Questions:	With N.E.	13.77	.74	N.S.
	Without N.E.	10.71		

5.2.5 Urban Boys With Nursery Education Versus Urban Boys Without It

The means and values of t were calculated and are shown in Table IX below.

TABLE IX

Differences Between Urban Boys With and Without Nursery Education

		Means	t	Significant at $p = .05$
First 25 Questions:	With N.E.	62.38	7.49	
	Without N.E.	16.37		
Second 25 Questions:	With N.E.	36.29	5.63	
	Without N.E.	8.43		
Last 50 Questions:	With N.E.	23.76	5.38	
	Without N.E.	5.75		

From the table, it can be seen that the means for the Urban boys with nursery education are roughly four times higher than those of their counterparts without nursery education. The t -values show that the urban boys with nursery education are significantly better than the urban boys without nursery education.

5.2.6 Rural Boys with Nursery Education Versus Urban Boys With Nursery Education

Table X shows that the urban boys with nursery education had a higher mean in all the three sections of the test than the rural boys with nursery education; the t -values indicated that significant differences occurred only in the first and the last sections of the test; where the urban boys with nursery education were better than the rural boys with nursery education. There was no significant difference between the two groups in their scores in the second twenty five items of the test. The results are shown in Table X.

TABLE X

Differences Between Rural and Urban Boys With Nursery Education

		Means	t	Significant at p .05
First 25 Questions:	Rural Boys	42.04	2.52	
	Urban Boys	62.38		
Second 25 Questions:	Rural Boys	28.40	1.18	
	Urban Boys	36.29		
Last 50 Questions:	Rural Boys	13.77	2.33	
	Urban Boys	23.76		

5.2.7 Boys With Nursery Education Versus Girls With Nursery Education

After the test was scored, it was found that the boys had a higher mean in all the three sections of the test. The t-test was applied to find out if the differences were significantly significant or not. As can be seen from Table XI, significant differences occurred only in the first and last sections of the test, where the boys with nursery education were found to be significantly better than the girls with nursery education.

TABLE XI

The Differences Between The Boys and Girls With Nursery Education

		Means	t	Significant at p .05
First 25 Questions:	Boys	54.39	4.24	
	Girls	31.60		
Second 25 Questions:	Boys	33.19	1.91	
	Girls	25.17		
Last 50 Questions:	Boys	19.83	2.36	
	Girls	13.10		

5.2.8 Boys Without Nursery Education Versus Girls Without It

The results in the test show that the boys without nursery education had a higher mean than the girls without nursery education. The obtained t-values show that there is no significant difference between the two groups in the first and last sections of the test. The girls were significantly better than the boys in the second section of the test. The results are shown in Table XII.

TABLE XII

Differences Between Boys and Girls Without Nursery Education

	Means	t	Significant at $p < .05$
First 25 Questions: Boys	27.20	1.60	N.S.
Girls	38.85		
Second 25 Questions: Boys	16.22	2.18	
Girls	27.88		
Last 50 Questions: Boys	8.90	1.70	
Girls	14.37		

5.2.9 Standard Three Versus Standard Four Pupils

The marks obtained by all pupils in standard three and four were analysed so that the two groups would be compared. It was found that standard four pupils had a higher mean than standard three in the whole test. The t - values calculated indicate that the differences were statistically significant and standard four pupils were significantly better than standard three pupils. The results are shown in Table XIII.

TABLE XIII

A Comparison of the Scores obtained by Standard Three and Four Pupils

	Mean	t	Significant at $p < .05$
First 25 Questions: Std 3	19.46	10.23	
Std 4	56.71		
Second 25 Questions: Std 3	14.42	7.14	
Std 4	37.27		
Last 50 Questions: Std 3	9.62	3.29	
Std 4	18.73		

5.2.10 Standard Three Girls Versus Standard Four Girls

The results obtained indicated that the standard four girls had a higher mean score in the whole test. *Their means were approximately twice those of the standard three girls in the second and last sections of the test.*

significance. The two groups of pupils were therefore not significantly different.

5.2.12 Pupils With Nursery Education Versus Those Without It

The pupils with nursery educational background tended to have slightly higher mean than those who had not had any nursery educational background. The differences were however statistically significant only in the first and last sections of the test where the children with nursery educational background were significantly better than those without it. Table XVI shows a comparison between the two groups of pupils.

TABLE XVI

A Comparison Between Pupils With Nursery Education and Those Without It

		Means	t	Significant at p .05
First 25 Questions:	With N.E.	41.35	2.42	
	Without N.E.	30.32		
Second 25 Questions:	With N.E.	27.07	1.76	N.S.
	Without N.E.	20.70		
Last 50 Questions:	With N.E.	15.62	3.46	
	Without N.E.	8.00		

The two groups were subdivided further to find out if there were any concealed differences that had not been observed in the larger group.

5.2.13 Girls With Nursery Education Versus Girls Without It

The results obtained from these groups indicate that the girls without nursery education performed better than their counterparts who had had nursery educational background. However though their means were higher, the girls without nursery education were not significantly better than those with nursery education. The results are indicated in Table XVII.

significance. The two groups of pupils were therefore not significantly different.

5.2.12 Pupils With Nursery Education Versus Those Without It

The pupils with nursery educational background tended to have slightly higher mean than those who had not had any nursery educational background. The differences were however statistically significant only in the first and last sections of the test where the children with nursery educational background were significantly better than those without it. Table XVI shows a comparison between the two groups of pupils.

TABLE XVI

A Comparison Between Pupils With Nursery Education and Those Without It

		Means	t	Significant at p .05
First 25 Questions:	With N.E.	41.35	2.42	N.S.
	Without N.E.	30.32		
Second 25 Questions:	With N.E.	27.07	1.76	
	Without N.E.	20.70		
Last 50 Questions:	With N.E.	15.62	3.46	
	Without N.E.	8.00		

The two groups were subdivided further to find out if there were any concealed differences that had not been observed in the larger group.

5.2.13 Girls With Nursery Education Versus Girls Without It

The results obtained from these groups indicate that the girls without nursery education performed better than their counterparts who had had nursery educational background. However though their means were higher, the girls without nursery education were not significantly better than those with nursery education. The results are indicated in Table XVII.

TABLE XVII

Differences Between Girls With and Without Nursery Education

	Means	t	Significant at p < .05
First 25 Questions: With N.E.	31.60	1.04	N.S.
Without N.E.	38.85		
Second 25 Questions; With N.E.	25.17	0.52	N.S.
Without N.E.	27.88		
Last 50 Questions: With N.E.	13.10	0.26	N.S.
Without N.E.	14.37		

5.2.14 Rural Girls With Nursery Education Versus Rural Girls Without It

Out of all rural girls used for the study, thirty four had nursery education while sixteen had not had it. The data obtained show that the means for the girls who had had nursery education were slightly higher than those of the girls who had not had any nursery education. The t - test however showed that the differences were not statistically significant. The results are shown in Table XVIII.

TABLE XVIII

A Comparison Between Rural Girls With and Without Nursery Education

	Means	t	Significant at p < .05
First 25 Questions: With N.E.	35.79	1.04	N.S.
Without N.E.	34.18		
Second 25 Questions: With N.E.	24.55	0.52	N.S.
Without N.E.	22.43		
Last 50 Questions: With N.E.	14.08	0.26	N.S.
Without N.E.	13.31		

5.2.15 Urban Girls With Nursery Education Versus Urban Girls Without It

Thirty nine girls from urban schools had had nursery education while eleven had not had any nursery education.

In all the three sections of the test, the girls who had not had any nursery education had a higher mean than those who had had nursery education. The t - test showed that the differences between the two groups were statistically significant in the first two sections of the test. The urban girls without nursery education performed significantly better than those girls who had had nursery education. The representative scores are shown in Table XIX.

TABLE XIX

The Differences Between Urban Girls With and Without Nursery Education

	Means	t	Significant at $p < .05$
First 25 Questions: With N.E.	28.41	4.59	
Without N.E.	45.63		
Second 25 Questions; With N.E.	25.71	3.08	
Without N.E.	35.81		
Last 50 Questions: With N.E.	12.25	1.48	N.S.
Without N.E.	15.90		

5.2.16 Standard Three Pupils With Nursery Education Versus Standard Three Pupils Without It

Out of the one hundred standard three pupils used for the study, sixty had had nursery education while forty had not had it. The former group had a higher mean than the latter but when the t - test was applied to find out if the differences were significant, it was found that the two groups were not significantly different in the first two sections of the test. The group which had had nursery education was found to be significantly better in the last section of the test than the group which had not had any nursery education. The results are shown in Table XX.

TABLE XX

Differences Between Standard Three Pupils With and Without Nursery Education

	Means	t	Significant at $p < .05$
First 25 Questions: With N.E.	20.86	0.84	N.S.
Without N.E.	17.35		
Second 25 Questions: With N.E.	16.85	1.57	N.S.
Without N.E.	10.75		
Last 50 Questions: With N.E.	11.70	2.06	
Without N.E.	6.50		

5.2.17 Standard Four Pupils With Nursery Education Versus Standard Four Pupils Without It

Sixty nine standard four pupils had had nursery education while thirty one had not had it. The results of the test showed that the mean score for the former group was higher than that of the latter group. The t-test however revealed no significant differences between the two groups. The results are shown in Table XXI.

TABLE XXI

Differences Between Standard Four Pupils With And Without Nursery Education

	Means	t	Significant at $p < .05$
First 25 Questions: With N.E.	59.69	1.50	N.S.
Without N.E.	50.06		
Second 25 Questions: With N.E.	38.92	1.54	N.S.
Without N.E.	33.45		
Last 50 Questions: With N.E.	19.79	1.02	N.S.
Without N.E.	16.77		

5.2.18 Standard Three Urban Boys With Nursery Education Versus Standard Three Urban Boys Without It

Out of the twenty five standard three urban boys *used for the study*, twelve had had nursery education while thirteen had not had it. The pupils with nursery education had higher means than the pupils without nursery education.

The t - test revealed that the difference between the two groups was statistically significant. Those who had had nursery education were significantly better than their counterparts who had not had it. The results are shown in Table XXII.

TABLE XXII

Differences Between Standard Three Urban Boys With And Without Nursery Education

	Means	t	Significant at $p < .05$
First 25 Questions: With N.E.	40.83	3.09	
Without N.E.	12.61		
Second 25 Questions: With N.E.	22.50	4.97	
Without N.E.	4.69		
Last 50 Questions: With N.E.	19.91	2.95	
Without N.E.	2.92		

5.2.19 Standard Three Rural Boys With Nursery Education Versus Standard Three Rural Boys Without Nursery Education

Eleven rural standard three pupils had had nursery Education while fourteen pupils had not had it. The group which had had nursery education had a slightly higher mean than the group which had not had it. The t - test however revealed that the differences between the two groups of pupils were not statistically significant in any of the three sections of the test. The results are presented in Table XXIII.

TABLE XXIII

Differences Between Standard Three Rural Boys With And Without Nursery Education

	Mean	t	Significant at $p < .05$
First 25 Questions: With N.E.	20.45	0.28	N.S.
Without N.E.	18.14		
Second 25 Questions: With N.E.	12.36	0.18	N.S.
Without N.E.	11.57		
Last 50 Questions: With N.E.	10.18	0.51	N.S.
Without N.E.	6.85		

TABLE XXV

A Comparison Between Standard Four Rural Boys With And Without Nursery Education

	Means	t	Significant at $p < .05$
First 25 Questions: With N.E.	63.63	1.34	N.S.
Without N.E.	48.64		
Second 25 Questions: With N.E.	44.45	1.42	N.S.
Without N.E.	29.78		
Last 50 Questions: With N.E.	17.36	0.62	N.S.
Without N.E.	14.57		

5.2.22 Standard Three Urban Girls With Nursery Education Versus Standard Three Urban Girls Without Nursery Education

The results show that the three girls who had not had any nursery education background had slightly higher means in the first two sections of the test than the twenty two girls who had had nursery education. The t - test was calculated to find out if the differences were statistically significant. It was found that there was no significant difference between the two groups in all the three sections of the test. The results are shown in Table XXVI.

TABLE XXVI

A Comparison Between Standard Three Urban Girls With And Without Nursery Education

	Means	t	Significant at $p < .05$
First 25 Questions: With N.E.	16.95	1.18	N.S.
Without N.E.	31.00		
Second 25 Questions: With N.E.	18.36	0.46	N.S.
Without N.E.	24.33		
Last 50 Questions: With N.E.	14.57	0.23	N.S.
Without N.E.	10.00		

5.2.23 Standard Three Rural Girls With Nursery Education Versus Standard Three Rural Girls Without It

When the mean scores for these pupils were compared, it was found that in the first section of the test, the ten girls who had not had any nursery education had a higher mean than the fifteen girls who had had nursery education. The two groups had the same mean score in the second section of the test. The girls with nursery education had a higher mean in the last section of the test than those who had not had nursery education. The t-test showed that the differences between the two groups were not statistically significant. Table XXVII shows the results.

TABLE XXVII

A Comparison Between Standard Three Rural Girls With And Without Nursery Education

		Means	t	Significant at p .05
First 25 Questions:	With N.E.	10.93	1.13	N.S.
	Without N.E.	18.30		
Second 25 Questions:	With N.E.	13.40	0.00	N.S.
	Without N.E.	13.40		
Last 50 Questions:	With N.E.	11.06	0.23	N.S.
	Without N.E.	9.60		

5.2.24 Standard Four Urban Girls With Nursery Education Versus Standard Four Urban Girls without It

The results obtained from these groups indicate that the girls who had not had any nursery education had a higher mean in the three sections of the test than the girls who had had nursery education. The t-test revealed that the differences between the two groups were not statistically significant. The results are shown in Table XXVIII.

TABLE XXVIII

A Comparison Between Standard Four Urban Girls With And Without Nursery Education

		Means	t	Significant at $p < .05$
First 25 Questions:	With N.E.	43.23	0.55	
	Without N.E.	51.12		
Second 25 Questions:	With N.E.	35.23	0.48	
	Without N.E.	40.12		
Last 25 Questions:	With N.E.	17.03	0.13	
	Without N.E.	18.12		

5.2.25 Standard Four Rural Girls With Nursery Education Versus Standard Four Rural Girls Without It

Out of the twenty five rural standard four girls used in the study, nineteen had had nursery education, while six had not had it. The latter group had a higher mean score than the former in all the three sections of the test. The t-test however revealed no significant differences in any of the three sections of the test. The results are shown in Table XXIX.

TABLE XXIX

A Comparison Between Standard Four Rural Girls With And Without Nursery Education

		Means	t	Significant at $p < .05$
First 25 Questions:	With N.E.	55.42	1.58	N.S.
	Without N.E.	60.66		
Second 25 Questions:	With N.E.	33.36	0.34	N.S.
	Without N.E.	37.50		
Last 50 Questions:	With N.E.	16.47	0.46	N.S.
	Without N.E.	19.50		

5.3 Brief Summary of the Results

From the above analyses, we may sum up the between-groups comparison as follows:

5.3.1 Significant differences were found between the following groups: (the "better" group is underlined).

- i) Boys/Girls - in the first section of the test.
- ii) Standard four boys/standard three boys - in the whole test.
- iii) Boys with nursery/Boys without nursery - in the test.
- iv) Urban boys with nursery/Urban boys without nursery - in the whole test.
- v) Urban boys with nursery/Rural boys with nursery - in the first and last sections of the test.
- vi) Boys with nursery/Girls with nursery - in the first and last sections of the test.
- vii) Girls without nursery/Boys without nursery - in the second section of the test.
- viii) Standard four pupils/standard three pupils - in the whole test.
- ix) Standard four girls/standard three girls - in the whole test.
- x) Pupils with nursery/Pupils without nursery - in the first and last sections of the test.
- xi) Urban girls without nursery/Urban girls with nursery - in the first two sections of the test.
- xii) Standard three pupils with nursery/Standard three pupils without nursery - in the last section of the test.
- xiii) Standard three urban boys with nursery/standard three urban pupils without nursery - in the whole test.
- xiv) Standard four urban boys with nursery/standard four urban boys without nursery - in the first section of the test.

5.3.2 No significant differences were found between the following groups:

- i) Boys/Girls - in the second and third sections of the test.
- ii) Rural boys with nursery/Rural boys without nursery - in the second and third sections of the test.
- iii) Rural boys with nursery/Urban boys with nursery - in the second section of the test.
- iv) Boys with nursery/Girls with nursery - in the second section of the test.
- v) Boys without nursery/Girls without nursery - in the first and third sections of the test.
- vi) Rural Pupils/Urban pupils - in the whole test.
- vii) Pupils with nursery/pupils without nursery - in the second section of the test.
- viii) Girls with nursery/girls without nursery - in the whole test.
- ix) Rural girls with nursery/Rural girls without nursery - in the whole test.
- x) Urban girls with nursery/Urban girls without nursery - in the third section of the test.
- xi) Standard three pupils with nursery/standard three pupils without nursery - in the first and second sections of the test.
- xii) Standard four pupils with nursery/standard four pupils without nursery - in the whole test.
- xiii) Standard three rural pupils with nursery/standard three rural pupils without nursery - in the whole test.
- xiv) Standard four urban pupils with nursery/standard four pupils without nursery - in the second and third sections of the test.
- xv) Standard four rural boys with nursery/standard four rural boys without nursery - in the whole test.
- xvi) Standard three urban girls with nursery/standard three girls without nursery - in the whole test.
- xvii) Standard three rural girls with nursery/standard three rural girls without nursery - in the whole test.
- xviii) Urban girls with nursery/Urban girls without nursery - in the whole test.

5.4 Further Information from the study

Owing to the fact that this test was scored in sections, it is rather difficult to say at a glance what the average score for the whole test was. This is because one school might be better than others in one section while its performance in the other sections remains poor. The school that managed to have the highest mean of all schools in the three sections of the test is Kakamega Primary School. Mumias Primary School appears to have taken the overall second position. Musaa and Bukhulunya schools had the lowest means.

5.5 Further Information about the pupils' vocabulary level

It was difficult to tell the exact level of the pupils' vocabulary. This is because the test was in three sections and by mere chance a pupil could score more in the final and more advanced part of the test than in the earlier, and easier, sections. However, such cases were rare and the marks showed a general tendency of decreasing from the first to the third section of the test.

The researcher decided that if a pupil scored fifty per cent or more in any section, he would be said to "know" most of the words at that level. For instance, a pupil who scored fifty per cent or more in section one of the test would be assumed to know the words from the commonest five hundred words and his vocabulary would be considered to be at this level.

The total number of pupils who scored fifty per cent or more in each section was counted. It was found that seventy three pupils (36 per cent of the sample) scored fifty per cent or more in the first section of the test, while thirty eight (19 per cent of the sample) had similar scores in the second section. Only seven pupils (3.5 per cent) managed to score fifty per cent or more in the last section of the test.

These numbers would be misleading if one did not take into account the fact that there might be duplication of figures since some of the pupils who scored fifty per cent or more in the first section of the test would be the

same ones who would score such percentages in the second or third sections of the test. It was therefore necessary to find out the exact number of pupils who had a vocabulary level of either five hundred, one thousand or two thousand words.

A closer scrutiny of the scores showed that a total of thirty seven pupils (making eighteen per cent) of the total sample used had managed to score fifty per cent or more in the first section of the test only. This is the number that one would say has a vocabulary level of approximately five hundred words.

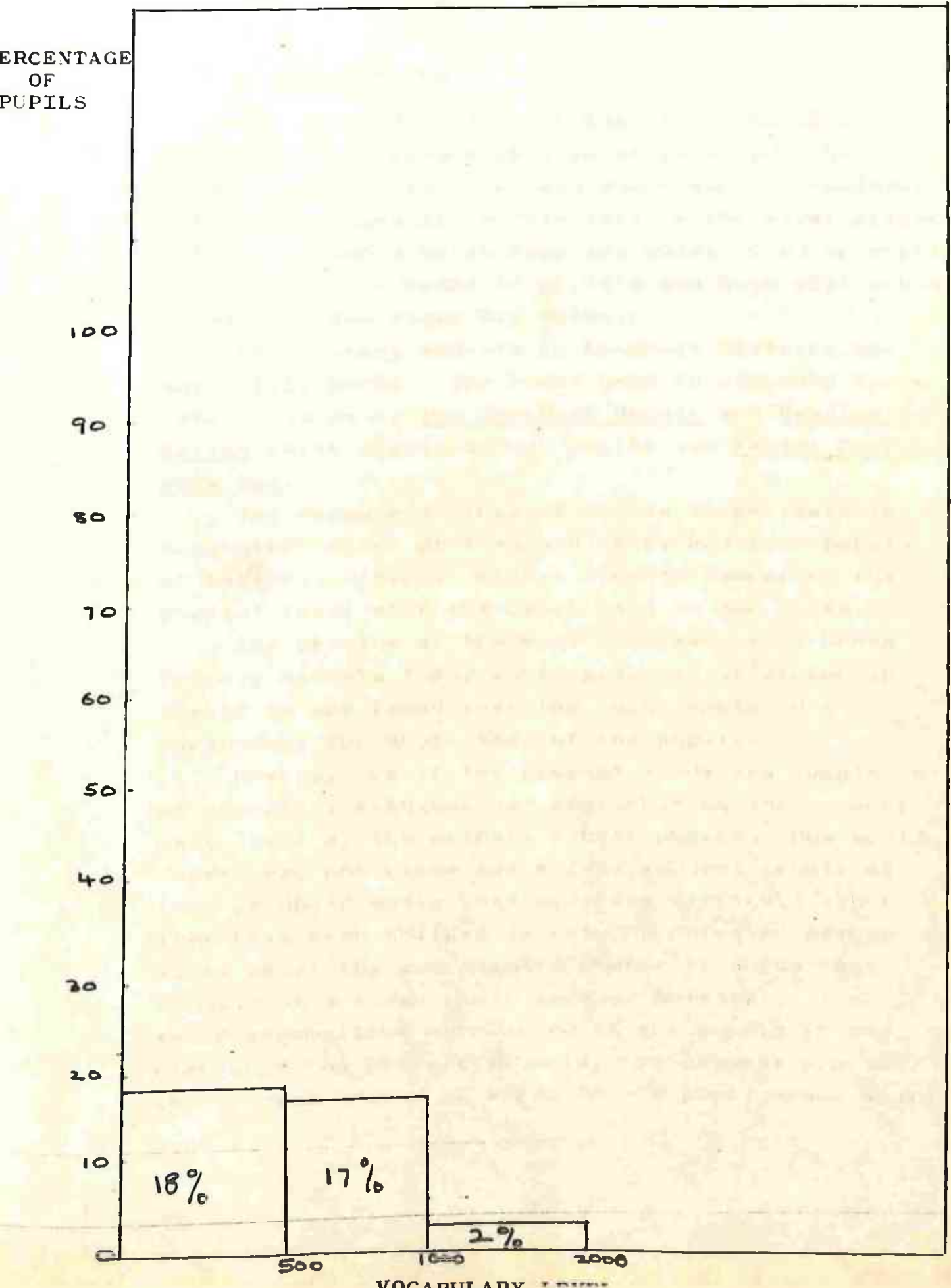
Thirty five pupils (seventeen per cent) scored fifty per cent or more in both the first and the second sections of the test. Since these two sections tested knowledge of the first commonest one thousand words, one would say that seventeen per cent of the pupils used for the study has a level of approximately one thousand words.

Only four pupils scored fifty per cent or more in all the three sections of the test. This indicates that two per cent of the pupils used for the study had a vocabulary level of approximately two thousand words. The remaining 63 per cent of the pupils did not achieve the 50 per cent criteria for even the first one thousand words.

It must be admitted that these vocabulary levels are only approximate. It was not possible to pinpoint exactly how many words a particular candidate knew, but the general over view of the vocabulary level of the pupils gives a picture of what one would expect from a standard three or four pupil of Kakamega District. It can be stated with some degree of confidence that the vocabulary level of the majority of the pupils is below one thousand words. This is indicated by the large number of pupils who did not manage to score fifty per cent in any of the three sections of the test. Figure II shows the percentages of pupils who demonstrated fifty per cent or more comprehension at the various vocabulary levels.

The histogram does not show where all the pupils fall in the vocabulary level. However, though only thirty seven per cent of the pupils are presented here, it does not imply that the other sixty three per cent have no vocabulary. Rather, majority of them fall between zero and one thousand words.

FIGURE II : A HISTO GRAPH SHOWING THE PERCENTAGE OF PUPILS WHO DEMONSTRATED FIFTY PERCENT OR MORE COMPREHENSION AT THE VARIOUS VOCABULARY LEVELS



CHAPTER SIXVOCABULARY LEVEL OF THE TEXTBOOKS IN USE6.1 INTRODUCTION

The Kenya Institute of Education (K.I.E.) undertakes the responsibility of preparing the primary school textbooks and supplementary readers. The K.I.E. books are widely used in the rural primary schools in Kenya while they are substituted or supplemented by other books in private and high cost schools in Nairobi and other big towns.

The primary schools in Kakamega District use the K.I.E. books. The books used in standard three were found to be The New Peak Reader and Reading in Action while standard four pupils use Safari Course Book One.

The essence of this study was to estimate the vocabulary level of standard three and four pupils of Kakamega District with a view to comparing the pupils' level with the level used in the books.

The problem of the many non-readers in Kenya Primary schools today would probably be accounted for if it was found that the books employed a vocabulary far above that of the pupils.

However, until the present study was completed no empirical evidence was available on the vocabulary level of the primary school pupils. One would therefore, not blame the K.I.E. subject panels if they produced texts that were too difficult since they have been obliged to rely on untested assumptions about the approximate number of words that a pupil of a given class knows. Moreover, if their assumptions were based on the pupils in the high cost and private schools, the chances are that the assumed number of words that a pupil knows would

be even more optimistic.

It seemed wise, therefore, to take the books used by the group under study and check samples for the purpose of determining their vocabulary level.

6.2 Method of Measuring the Vocabulary

An exhaustive study of vocabulary level in any large text would be beyond the resources of an individual investigator. A simple rough but useful estimate was obtained by the following method.

6.2.1. Selection of Words

Our concern was of course with the "harder" words, arbitrarily defined as words beyond the commonest five hundred. Each of the two standard three texts mentioned in 6.1 was taken in turn and read through, the reason being that these texts were short and the passages were similar. Words outside Thorndike's commonest five hundred were listed. Prepositions (most of which occur in my case within the commonest five hundred words) were omitted. Proper nouns and other words peculiar to Kenyan setting were also omitted. The latter would include words like 'safari', 'sufuria'.

In Safari Course Book I A wide range of passages was picked for scrutiny. The passages included poems, songs, excercises, stories and riddles. All in all, a total of four hundred and fifteen words were listed and provided the sample for analysis (see 6.2.2.)

6.2.2. Determining the level of vocabulary

Thorndike (1944) was used as the yardstick, since it had already provided the basis for measuring the pupils' vocabulary level. Each words listed in 6.2.1 above was looked up in the Thorndike Wordlist and the number of occurrences per million

words as listed by Thorndike in his 'G' column was noted. This enabled the researcher to find out the vocabulary range of the pupils' books and compare it with the range of the pupils' vocabulary.

6.3 Conclusions

From the corresponding frequency numbers in Thorndike's Wordlist, it was possible to calculate the "commonness" of a given item. It was found that the vocabulary ranged from "AA" (words occurring in the commonest one thousand words) to "1" (words that occur only in a thirty thousand word list).

Percentages of the various word categories were calculated. Words marked AA down to 19 represent the first commonest four thousand words which according to Thorndike would be an appropriate vocabulary level for Grade four native English speakers. The following number of words were counted as representing the four categories (in groups of one thousand) in the pupils' books. The AA words representing the commonest one thousand words were found to be sixty four. One hundred and seven words came from the second commonest one thousand words, while ninety two were from third commonest one thousand words. There were fifty two words from the fourth commonest one thousand words. The fifth and sixth thousand words were represented by twenty three and twenty four words respectively, while nine words were from the seventh commonest one thousand words. There were forty words beyond the seven thousand commonest word level. There were four words, each of which has an occurrence of at least one per four million words. Table XXX shows the percentage of the various word groups obtained from the word count of the texts.

From the observation, it was found that twenty four percent of the words sampled from the standard three and four texts were beyond the four thousand

word level.

The pilot study had showed that the pupils' vocabulary level was below four thousand; Figure I indicates the approximate level of the vocabulary of the pupils used in the pilot study. It shows that ninety seven per cent of the pupils scored up to twenty five per cent or below and this led to the tentative assumption that the majority of the standard three and four pupils had a vocabulary level of below one thousand words.

Test C (Page 103) had been compiled to test knowledge of the first commonest two thousand words, so that it would cater for the exceptional children who might know words above the one thousand word level indicated by the pilot study as the approximate vocabulary level of most children.

The percentage of "harder" words taken from the class readers and which fell in the category of first commonest two thousand words was forty one. This indicates that even the bright pupils who obtained fifty per cent or more in the whole test, thus displaying knowledge of the first commonest two thousand words, would still not understand fifty nine per cent of the "harder" words taken from the class readers.

This might seem a rash conclusion considering that the prepositions and other 'easy' words from the first commonest one thousand word level had been omitted, thus lowering the percentage of words falling in this category. This is however counteracted by the fact that the range of vocabulary level is extremely wide. Even if all the words in the first commonest one thousand words were omitted, the picture would be similar.

Referring to Figure I (Page 24), and figure II, one can see that only seventeen per cent of the total *number of pupils* can be said to have a vocabulary

Table XXX The number and percentage of "hard" words of various frequencies found from the list of words compiled from the standard three and four English class readers

FREQUENCY	NUMBER OF "HARD" WORDS	PERCENTAGE
(Commonest ^{AA} 1000)	64	15
(2nd ^A commonest 1000)	107	25
(3rd ^{49 - 30} one thousand)	92	22
(4th ^{29 - 19} one thousand)	52	12
(5th ^{18 - 14} one thousand)	23	5
(6th ^{13 - 10} one thousand)	24	5
(7th ^{9 - 8} one thousand)	9	2
(Beyond ^{7 - 1} 7000 words level)	40	9
	4	one occurrence per four million words

TOTAL 415

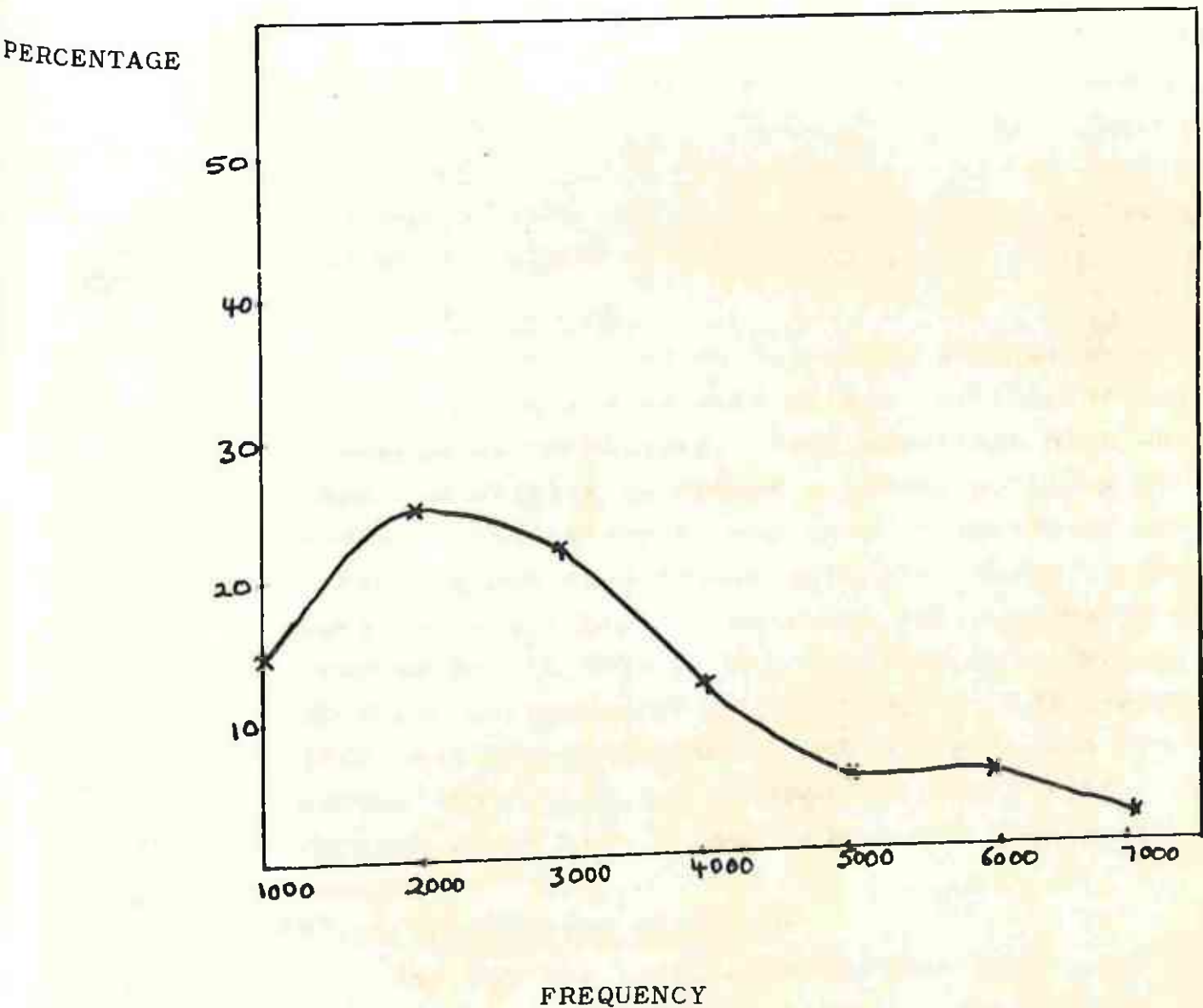
level of the commonest one thousand words; while only two per cent can be said to possess a vocabulary level of two thousand words. The rest of the pupils lie somewhere between the zero and the one thousand word level. This implies that this seventeen per cent of the pupils would know fifteen per cent of the sampled words: (Refer to Table XXX.) On the other hand, only two per cent of the sample used for the study could be said to understand forty one per cent of the words sampled from the texts. The fact that the highest vocabulary level obtained by the pupils is just below two thousand words shows the pupils would have difficulty with the words which are beyond this level. From sampled "harder" words, it was found that fifty nine per cent of them were beyond the two thousand word level. Hence the pupils would not know more than about forty one per cent of the "harder" words in the text; and fifty nine per cent of the "harder" vocabulary items used would be beyond their reach.

This brief comparison between the pupils' vocabulary level and the vocabulary level of the class texts shows that books have a vocabulary level well beyond that of the pupils. It also shows that nearly all the pupils would understand less than half of the "harder" vocabulary items used in the text (forty one per cent). Figure III shows the curve obtained from the graphic presentation of the various word frequencies and percentages of words listed from the class books.

FIGURE III

THE FREQUENCY AND PERCENTAGES OF 'HARDER'
WORDS LISTED FROM THE STANDARD THREE AND
FOUR ENGLISH TEXTS

NB. FREQUENCY OF WORDS BEYOND THE SEVEN
THOUSAND CATEGORY ARE NOT PRESENTED
HERE.



CHAPTER SEVEN

CONCLUSION

7.1 Limitations Of The Study

All research in vocabulary development encounters certain practical difficulties. The adult cannot control the pupils' experience. Studies of the vocabulary of children beyond the home years are based on samples of vocabulary. Conclusions of such a study would depend on the following:

7.1.1. Sample of Pupils Selected For Study

A child is a social being with distinct experiences from any other child. There is increasing evidence that socio-economic status, the place of the child in the family as well as school environment influence the findings. This is a factor that had not been controlled in this study.

7.1.2 Methodology

The method used to determine whether or not a child knows a word will affect the conclusions of research on vocabulary. Does knowledge of a word mean the ability to define a word?; pointing at a picture that refers to the word in question? or selecting one item from a multiple choice list? Does the pupil have to know the various shades of meaning and be able to use the word in a variety of types of sentences? All these are the questions that face the researcher in this field, and the *answer* that one gives to such questions will influence the test constructions and consequent results.

7.1.3 Definition of 'Word'

The way the researcher defines the 'word' as a unit of measurement will also affect the conclusions. Will the researcher consider items like

'walk', 'walking' and 'walked' as three separate words or as varieties of one word? Thorndike (1, 1944) treated each of these words with its various forms and meanings as one word.

A word like 'spring' has several meanings. It is upto the researcher to choose the meaning he wants to test. This choice would also affect the conclusions. If for instance a researcher in Kenya wanted to find out if the pupils know its meaning in relation to seasons, he would realize that most children do not know this meaning of the word since it is not in their experiences. But 'spring' meaning a piece of metal would probably be a better known word.

7.1.4 Sampling of Words

The method used for selecting the sample of words for the vocabulary test could also affect the conclusions. The larger the word list used for selecting the sample, the greater the proportion of commonly used words. The word list in Thorndike (1, 1944) does not tell us the uses to which the word can be put or the difficulty that the children have with their understanding and use. Each person reads into them meaning they have for him as a result of his experiences.

7.2 Recapitulation and Discussion

Environment is revealed as an important factor in this study. Those schools that had an environment conducive to language development appear to have taken a leading position in the test. This is probably why Kakamega Primary School had such good overall results. The schools which did not use English except during English lessons seem to have scored less.

One might have expected some significant difference between boys and girls. This is because the former are more outgoing, and are allowed more freedom at home. Such freedom would give them a better chance to develop their vocabulary. The girls on the other hand are usually allowed less freedom as they have to stay at home and help their mothers in the household chores after school hours. However the only significant differences appear in the commonest five hundred words where the boys performed better than the girls. Probably the two groups found similar difficulties in the last two sections of the test. The kind of different life patterns that these different sexes are exposed to at home are not a very important factor in their further vocabulary development.

As one would expect, standard four pupils were significantly better than the standard three pupils. This is because the former group has been in the school system for a longer time than the latter group. They therefore, have attained more as a result of experience and maturity.

Nursery educational background seems to have a positive effect on the boys. Those who had nursery educational background were significantly better than those without it. Nursery schools are the first places that most children come across any kind of formal education. They are agents of socialization and are also places where language is developed. The introverts come into contact with the extroverts and they share their varied backgrounds. It was therefore, likely that the children who have been to nursery school will be on a higher vocabulary and linguistic level on entry to school than those without nursery educational background.

Not all nursery schools however, play the role that they are expected to. Some are run on the lines of a rigid school system. The children are left with little or no room to discover and experiment with new forms of language without meeting with rebuff from their teachers.

This probably explains why only some nursery schools seem to have made a difference to the pupils' vocabulary level. In some cases the pupils who have been to nursery schools perform the same as those who have not been to nursery schools. This seems to be the case with the rural boys who have been to nursery school versus those who have not been to nursery.

On the other hand, the urban boys who have had nursery educational background performed significantly better than their counterparts who had not had it. Since there was found to be no significant overall difference between rural and urban pupils, it seems that the factor that produced the difference is the nursery education. Possibly the urban nursery schools have a better effect on the pupils than the rural ones. The nursery schools set in the urban areas usually have a better environment than their rural counterparts. But probably it is the experience that the rural and urban pupils take to the various nursery schools that produce the different vocabulary results and not the nursery school "per se."

Though the analysis of rural and urban pupils showed no significant differences between the two groups, it is interesting to note that the urban boys with nursery educational background performed significantly better than the rural boys who had had nursery educational background. One can not be quite sure whether it is the nursery educational background that had produced the results or whether it was the primary school environment and experiences.

However, it was found that even standard three urban boys with nursery education were significantly better in the whole test than those without nursery education and also standard four urban boys with nursery education were significantly better in the first section of the test than those who had not had any nursery education. It was also found that there was no significant difference between rural standard three or four boys with nursery education and those without. One would therefore be inclined to conclude that nursery educational background has more positive impact on the urban than on the rural boys.

It is interesting to note that the nursery educational background does not appear to have significant effect on most groups of girls. When the whole group of rural girls with nursery education and those without were considered, it was found that the differences were not statistically significant. The same conclusion was reached when standard three and four urban and rural girls were compared. However, when the whole group of urban girls was looked at, statistically significant differences were found in the first two sections of the test. The group that was found to be better was the one without any nursery educational background. It seems therefore, that whereas nursery educational background had a positive effect on the boys, it had a negative effect on the urban girls.

When all the pupils irrespective of sex or urban/rural background but with nursery educational background were compared with all the pupils without it, it was found that the group with nursery educational background performed significantly better in the first and the last sections of the test. The two groups however showed no significant differences in

their performance in the second section of the test.

By and large, one would come to the conclusion that nursery education had a positive effect on the pupils' performance in the vocabulary test.

The reasons for Kakamega Primary School's good overall performance are not hard to understand. The school is in town and from a brief survey, it seems that most of the children there have parents working in town. Most of them are therefore probably exposed to reading materials at home. English also seemed to be the language of social interaction in the school and most pupils indicated that their parents spoke English. Therefore to these pupils, English is not exclusively the language of the school. A short interview with the teachers revealed that the pupils not only use their school books but are also encouraged to borrow books from nearby public library which caters for a wide range of children's reading materials. The teachers do not assume that the pupils borrow these books, they have a system whereby pupils discuss and write a few answers to questions on the books they have read.

The school itself has what one would call an encouraging environment. The classrooms have doors and windows, as well as lockable cupboards in the classrooms where the pupils can keep their materials. All this would help the pupils in their learning process and it would also help in developing their vocabulary.

Though Musaa and Bukhulunya are within the Municipality they are not different from the rural schools. They had the worst results in the test. The pupils are from the neighbourhood which forms the suburbs of Kakamega Town. The children are mainly of the Luhya tribe and understand each other perfectly

well in their mother tongue without having to resort to English to communicate their needs to each other. One therefore finds that the two basic languages used in these schools are Kiswahili and Luhya; the teachers using the former while the pupils mainly use the latter. The development of English language therefore tends to be slow, since the pupils use it usually only during the English lessons. The researcher noticed that the teachers nearly always addressed themselves to the pupils in Kiswahili.

Some of the classrooms in these two schools like most of the others visited were of temporary type: earthen walls and floors with only gaps in the walls to serve as windows. The doors are also just gaps in the walls. As such, no pupils' materials can be kept in the classrooms, and in all cases the staff-rooms were too small to keep such materials. It was also noticed that even where the classrooms were of permanent type (stone), there were no soft boards on which the teachers could put up anything. Most of them also did not have doors or windows.

A complaint voiced by teachers of the schools under study is that materials do not reach them in time. The 'red tape' makes it impossible for the heads of schools to travel to Nairobi and get the necessary books from the Kenya School Equipment Scheme.

All these problems and shortcomings experienced by most of Kakamega schools probably account for the rather low vocabulary level of the pupils. The children have to use language frequently if they are to know it well. These problems are probably not unique to Kakamega District but may be widely experienced by perhaps eighty per cent of Kenya's Primary School pupils who are in the rural areas.

7.3. Implication for Further Research

More research is needed in the field of vocabulary, especially in Kenya where very little has been done. The present study was limited to one district and two standards. It is felt that there should be follow-up studies to find out the vocabulary levels of the primary school children from other districts in the country. It would also be a valuable piece of information to know the vocabulary level of the pupils of different classes in Nairobi. This would provide a means of comparing the pupils from upcountry and those from the city primary schools. It would also be useful to find out if there is any significant difference between the vocabulary level of the pupils who have been instructed in English (English Medium) from standard one, and those who were taught English as a subject in the lower primary. This information would enable us to state which method or medium is better, with regard to vocabulary development - something that we cannot say with a lot of confidence at present.

7.4 Implications for Textbook Writers

A survey of the vocabulary range of the books that the pupils under study used was deemed necessary, to enable us to find out if there is any discrepancy between what the pupils actually know and what the text-book writers assume they know.

From the survey, it is clear that the pupils' vocabulary level is well below the vocabulary level of the textbooks. It would be useful for the K.I.E. subject panels and writers to take this point into consideration for any new book. Even when they are writing books for classes other than the ones used for this study, it would be good if they carried out a survey to determine the approximate level of the pupils vocabulary, and from this find the appropriate

vocabulary to use in the textbooks. This would mean carrying out a cross-section survey to produce something that is not too simple for the urban pupils or too difficult for the rural pupils. One hopes that the New Progressive Peak Series will be more simplified than the Peak Course Series. It also seems about time the Safari course books were revised.

7.5 Implication for Teachers

Next to the family, the teachers are the greatest agents of socialization. The parents trust their children to them for about eight or nine hours a day. The future of the children therefore lies with the teachers. It is from them that the pupils learn a new language, and new forms of expression through this language. If therefore, a teacher's vocabulary is meagre, he will have little contribution to make towards the child's vocabulary development. The primary school child is fond of imitation: he imitates both the good and the bad from his teachers. The teachers should therefore make sure that their pupils are picking up useful language patterns.

Very often, teachers get carried away by their oratory abilities. They forget that the pupils to whom they are addressing themselves may not understand them, or if they do, it is only to a very limited extent. The temptation of using very difficult vocabulary is widespread among all teachers. They take for granted that pupils know certain words whereas in fact they do not. It is therefore important that teachers adapt themselves to the level of the children so that they can bring about maximum understanding.

Language develops best in a free atmosphere where children are free to communicate their needs to the teachers and to other children without fear of ridicule. Teachers must therefore make sure that their classrooms allow maximum participation by all pupils. Pupils are prone to make mistakes, but if such mistakes

are corrected immediately and new correct forms taught, then pupils will learn fast. The teachers must not have the fear that the class might become unruly and unnecessarily noisy. The more language-using activities the children have either inside or outside the classroom, the more confident they get and the faster they learn. They must draw out the quiet child and make him feel part and parcel of the class. They must arrange different activities to fit all the different types of children in their class.

Vocabulary development is not the duty of only the English teacher, nor is it an activity to be carried out only during English lessons. All the teachers must feel that this is a corporate responsibility which cannot be left only to the English teacher. Different curriculum areas should be used as possible grounds for vocabulary development. When this is done, children learn different types of vocabulary, for instance technical as well as everyday items.

Reading plays a very important part in the development of vocabulary. Indeed, the reading vocabulary surpasses speaking, and writing vocabulary in the later school years. The importance of varied reading materials for primary school children cannot be over emphasized. The more the children read, the more chance they have of developing their reading vocabulary. The teachers should make maximum use of the class libraries. It is clear that most schools have only a few books in cartons to serve as the library. However when these books are properly rotated among the pupils, they can serve their purpose. It would also be a good idea if the teachers read these books so that they are able to discuss them with the children who have read them. They should not punish the pupils who do not understand most of

the vocabulary used in them. Instead they should realize that these classbooks are not necessarily of the pupil's vocabulary level and should therefore be willing to help these children. Those words that can be pictorially presented should be presented this way.

Audio-visual aids are very useful in conveying a particular idea to the pupils. These should be clear so that they can serve the purpose.

The Kenya Primary school children are living in a country faced with a language dilemma. Politically, they are told that Kiswahili is the National Language; implying that this should take precedence to English. However, Kiswahili is not as yet examined in the Primary Schools External Examination of the Certificate of Primary Education (C.P.E.). It was also decided that with effect from January 1975, the language of instruction should be vernacular up to standard three and then English would take over as the medium of instruction. English is therefore taught as a subject in the lower primary school. However this policy seems to apply only in the rural schools. The urban schools which cater for a cosmopolitan society cannot use any one vernacular since Kenya has a multiplicity of vernaculars. In such schools, English or Kiswahili has to be used.

Lacking a specific language policy the teachers might not be sure of which language to teach and when. However, this study having been based on English language gives ideas about the teaching and developing of English vocabulary. So long as the other languages are not examined in the C.P.E., the first external and the most important examination for the primary school children, English will continue to be important and it is the teachers' duty to see that the pupils have acquired a wide vocabulary through which they can communicate their needs to other people even after their formal education.

This is more so because for the majority of pupils, the Primary Education is the only formal education they will have.

FOOTNOTES

1. Thorndike, E.L. and I. Lorge 1944 The Teachers' Wordbook of 30,000 Words. New York: Columbia University Press.
2. Tidyman, W.F. et al. 1959 Teaching The Language Arts. New York: McGraw Hill Book Co. PP.282-286
3. Strickland, R.G. 1957, The Language Arts in the Elementary School. Boston, D.C. Heath and Company. PP.221-238
4. Dawson, M.A. et al. 1963 Guiding Language Learning. New York: Harcourt, Brace and World Inc. PP.61-80
5. Spache, G.D. 1964 Reading in the Elementary School. Allyn and Bacon, Inc. Chap.13.
6. Bernstein, B. 1961 "Social Class and Linguistic Development; A Theory of Social Learning" in A.H. Halsey et al (Ed.) Education, Economic and Society, PP.288-315, New York: Free Press of Clencoe, Inc.
7. Milner, E. 1951 " A study of the Relationship between Reading Readiness in Grade One Children and Patterns of Parent-Child interaction". Child Development: Vol.XXII, PP.95-112
8. Deutsch, M. 1972 "The role of Social Class in Language Development and Cognition" in Mills, B.C. 1972 Understanding The Young Child and His Curriculum, Selected Readings. New York: MacMillan Company. P.489
9. Hilderbrand, V. 1971 Introduction to Early Childhood Education. New York: The MacMillan Co. PP. 167-182
10. Anderson, P.S. 1964 Language Skills in Elementary Education. New York: The MacMillan Co. PP.17-19; 212-213
11. Petty, W.T. et al. 1973 Experiences in Language: Tools and Technique for Language Arts Methods. Boston: Allyn and Bacon, Inc. P.23

12. Dechant, E.V. 1964 Improving The Teaching of Reading. New Jersey: Englewood Cliffs, Prentice Hall, Inc. P.325
13. Meras, E.A. 1962 A Language Teacher's Guide. New York: Harper and Row Publications. PP 147-149
14. McKee, P. 1937 "Vocabulary Development". 36th Yearbook on National Social Study of Education: Public School Publication Co. P.150
15. Smith, N.B. 1963 Reading Instruction on For Today's Children. Englewood Cliffs. New Jersey: Prentice-Hall Inc. P.208
16. Fries, C.C. 1945 Teaching and Learning English as a Foreign Language. Michigan: University of Michigan Press. PP.38-56
17. Bright, J.A. and G.P. McGregor, 1970 Teaching English as a Second Language. London: Longman Group Ltd. PP. 14-51
18. Chester, R. and W. Otto. "Children's Sight Words- Printed Material or Oral Production", The Journal of Educational Research. Vol.67:6; 1974.
19. Burroughs, G.E.R. and H. Walker, "Sex Differences in the vocabulary of Young Children", Education Review, Vol.II, 1958-59. PP.192-204
20. Templin, M.C. 1957 Certain Language Skills in Children. University of Minnesota Press. Referred to by Strickland P.246.
21. Gulliford, R. 1959 "Teaching the Mother Tongue to Backward and Subnormal Pupils." Educational Research. Vol. 2 PP. 82-100
22. Carrol, J.B. 1953 The Study of Language. Havard University Press.
23. Morris, I. 1967 "Principles of Vocabulary Control" in Lee, W.R. English Language Teaching Selection I. London: Oxford University Press. PP. 32-39
24. Burns, P.C. 1973 Elementary School Language Arts: Selected Readings. New York: Rand McNally and Co. P.79

25. Trauger, W.K. 1963 Language Arts in Elementary Schools. New York: McGraw Hill, Inc. PP.176-178
26. Laird, C. 1959 Thinking About Language. New York: Holt, Rinehart and Winston, Inc. Quoted by Trauger, 1963 on P.178
27. Lado, R. 1964 Language Teaching. New York: McGraw-Hill, Inc. PP.116-130
28. Rivers, W.M. 1968 Teaching Foreign Language Skills. Chicago: The University of Chicago Press. PP.208-210; 300-301
29. Ballard, P.B. 1964 Teaching and Testing English. London: University of London Press. PP.19-28; 152-154

Appendix A(i)

Test A - which had to be discarded because it was found to be unrepresentative of all the commonest first four thousand words.

MY SCHOOL

MY CLASS

BOY OR GIRL?

(tick one)

DID YOU GO TO NURSERY SCHOOL?

YES/NO

(tick one)

ANSWER ALL THE QUESTIONS. Put a tick (✓) against the number you feel is the correct answer.

VOCABULARY TEST A

1. On Sundays I visit my friend. This means
 - (a) I play with him
 - (b) I go to see him at his home
 - (c) I write a letter to my friend

2. To keep something means
 - (a) To throw it away
 - (b) To like it
 - (c) Not to let it go

3. We can only get into the house when the door is
 - (a) closed
 - (b) open
 - (c) locked

4. Onyango is a poor man. This means
 - (a) He is old
 - (b) He is happy
 - (c) He has no money

5. The cup is full of milk. This means
 - (a) We can add some more milk in the cup
 - (b) There is nothing in the cup
 - (c) There is no space in the cup for any more

6. We can eat it when we are hungry
 - (a) medicine
 - (b) bread
 - (c) water

7. At this time it is dark and we go to sleep
 - (a) morning
 - (b) night
 - (c) afternoon

8. When I go home, my mother will me to the shop to buy salt.
- (a) Ask
 - (b) Tell
 - (c) Send
9. To stop walking means
- (a) To go on walking
 - (b) To stand still
 - (c) To walk fast
10. Wait for your friend. This means
- (a) Leave him
 - (b) Do something for him
 - (c) Do not go till he comes
11. This is a name for a colour
- (a) Dress
 - (b) Black
 - (c) Book
12. Your home means
- (a) Where you and your family live
 - (b) Where your teacher and his family live
 - (c) Where your friend lives
13. What comes out when you cut your finger?
- (a) Red
 - (b) Blood
 - (c) Water
14. What tells us what time it is?
- (a) Water
 - (b) Minutes
 - (c) Clock

15. The of sugar is five shillings per kilogram
- (a) prize
 - (b) amount
 - (c) price
16. A number of objects arranged in a line is a
- (a) circle
 - (b) row
 - (c) group
17. Which of these words tells us the shape of an object?
- (a) brown
 - (b) round
 - (c) heavy
18. We see smoke when
- (a) there is fire
 - (b) it is raining
 - (c) it is dark
19. To tear something means to
- (a) make a hole
 - (b) wash it
 - (c) beat it
20. A group of people is called
- (a) a herd
 - (b) a cloud
 - (c) a crowd
21. Small babies drink milk instead of tea. This means
- (a) they drink milk and tea
 - (b) they drink milk only and no tea
 - (c) they do not drink milk or tea

22. The children are quite happy. This means
- (a) They are happy and silent
 - (b) They are completely happy
 - (c) They are not happy
23. To offer something means
- (a) To ask for something
 - (b) To buy something
 - (c) To give something
24. It is usual for pupils to talk in class. This means
- (a) It is wrong for pupils to talk in class
 - (b) It is common for pupils to talk in class
 - (c) It is good for pupils to talk in class
25. My mother is busy in the kitchen. This means
- (a) She is resting in the kitchen
 - (b) She is sleeping in the kitchen
 - (c) She is working in the kitchen
26. What moves along the Railroad?
- (a) Lorries
 - (b) Trains
 - (c) Aeroplanes
27. The teacher told us to remove the chairs from the classroom. This means
- (a) To move the chairs to a different part of the classroom
 - (b) To take the chairs outside
 - (c) To put the chairs in the classroom
28. My mother suggests that I go to play. This means
- (a) She forces me to go to play
 - (b) She thinks that I should go to play
 - (c) She is not happy when I go to play

29. I will not mention it to anybody. This means
- (a) I will not give it to anybody
 - (b) I will not tell anybody about it
 - (c) I will not sell it to anybody
30. The people in the forest are in danger.
This means
- (a) They are in the dark
 - (b) They are not safe
 - (c) They are in a hurry
31. My real name is James not Jim. This means
- (a) My correct name is James
 - (b) My other name is James
 - (c)
32. To do something daily means to do it
- (a) Every week
 - (b) Every day
 - (c) Every month
33. I looked for my pen in vain. This means
- (a) I looked for my pen in the blood
 - (b) I looked for it but did not see it
 - (c) I felt pain when I was looking for it
34. I tremble when I see the teacher with a stick
- (a) I start crying
 - (b) I start shaking
 - (c) I have trouble
35. We reserved the food for the visitors. This means we
- (a) Prepared the food for visitors
 - (b) Kept the food for visitors
 - (c) Served the food for visitors

36. I do not want any more food. I am satisfied.
This means
- (a) I am sick
 - (b) I have had enough food
 - (c) I am not happy
37. The little girl is lovely. This means
- (a) She loves me
 - (b) She is beautiful
 - (c) Everyone loves the girl
38. It is likely to rain in the afternoon. This means
- (a) I would like it to rain in the afternoon
 - (b) It will probably rain in the afternoon
 - (c) It is difficult for the rain to fall in the afternoon
39. The rain will delay the bus. This means ^{the bus will}
- (a) Have an accident
 - (b) Be late in coming
 - (c) Be very dirty
40. To combine two things means
- (a) To collect them
 - (b) To put them together
 - (c) To compare them
41. My father told me to attend the chief's meeting.
This means
- (a) To attack the chief at the meeting
 - (b) To go to the meeting
 - (c) To arrange the meeting
42. The road which goes to Nairobi is ancient.
This means

- (a) Very narrow
(b) Very old
(c) Very broad
43. The bull was enormous. This means it was
(a) Friendly
(b) Very big
(c) Funny
44. The man was told to quit the house. This means he was told to
(a) Tell the people in the house to keep quiet
(b) Clean the house
(c) Leave the house
45. There was a crack on the wall of our house. This means there was
(a) An insect on the wall
(b) A hole in the wall
(c) A canal in the wall
46. We had a good harvest from our garden. This means we had a good
(a) Crop
(b) Soil
(c) Rain
47. My father has financial problems. This means he has
(a) Money problems
(b) Family problems
(c) Health problems
48. A pearl is
(a) A kind of dress
(b) Something which costs much
(c) An animal

- 49 Poison is something that can
 (a) make people happy
 (b) kill people
 (c) burn people
- 50 The climate of my country is
 (a) cloudy always
 (b) hot and raining throughout the year
 (c) agriculture
- 51 The man was innocent. This meant
 (a) he was good
 (b) he did nothing wrong
 (c) he was very strong
- 52 To submit something means
 (a) to fasten something
 (b) to discuss something
 (c) to give something
- 53 Anyango's work has shown some improvement.
 This means Anyango's work has become
 (a) worse
 (b) better
 (c) more untidy
- 54 The children tried to conceal the letter they
 were reading. This means to
 (a) hide the letter
 (b) cross the letter
 (c) tear the letter
- 55 A mixture means
 (a) something for eating only
 (b) many different things put together
 (c) a garden

- 56 An eagle is
(a) an animal
(b) a bird
(c) a mineral
- 57 A purse is used for
(a) carrying money
(b) carrying school books
(c) carrying food
- 58 To dispose of something is
(a) to like something
(b) to throw something away
(c) to buy something
- 59 To persuade somebody means to
(a) make somebody afraid
(b) make somebody pleased
(c) make somebody believe
- 60 To sob means
(a) to cry loudly
(b) to shout loudly
(c) to drink a lot of soup
- 61 My mother's father is my
(a) uncle
(b) grandmother
(c) grandfather
- 62 This is a remarkable story. This means
the story is
(a) interesting
(b) good to mark
(c) long
- 63 I cannot distinguish between Mary and Myra.
This means I cannot

- (a) walk between Mary and Myra
- (b) tell the difference between Mary and Myra
- (c) sit between Mary and Myra

64 Pigeon is

- (a) a bird
- (b) an egg
- (c) a planet

65 To howl is to

- (a) walk fast
- (b) cry and shout loudly
- (c) to hammer at something

66 Our vacation will start in December. This means

- (a) our exams will start in December
- (b) our holidays will start in December
- (c) our work will start in December

67 To stop means

- (a) to stand still
- (b) to bend down
- (c) to hide

68 Who are the Elders?

- (a) the working people
- (b) the clever people
- (c) the older people

69 Our ruler is a kind person. This means

- (a) our brother is a kind person
- (b) the one who draws lines is a kind person
- (c) our leader is a kind person

70 I will contact you means I will

- (a) see you
- (b) employ you
- (c) beat you

- 78 Donkeys pull
(a) cats
(b) carts
(c) cars
- 79 To offend means
(a) to offer something
(b) to make someone angry
(c) to like somebody
- 80 To carve something means
(a) to stop something from being straight
(b) to make something from wood
(c) to like something
- 81 To shriek means to
(a) shout
(b) talk
(c) shiver
- 82 To know how to read is of primary importance.
This means knowing how to read is
(a) of little importance
(b) of great importance
(c) only for primary school pupils
- 83 A speaker is
(a) one who talks to the people
(b) one who flatters people
(c) one who is good to the people
- 84 To cling to something means
(a) to hold something firmly
(b) to go near something
(c) to look at something

- 71 Mankind means
- (a) a kind man
 - (b) all people
 - (c) criminals
- 72 My father puts the maize in the
- (a) sack
 - (b) suck
 - (c) scratch
- 73 My mother was discharged from the hospital.
This means my mother
- (a) was taken to the hospital
 - (b) was not charged any money in the hospital
 - (c) came out of the hospital
- 74 Jane resembles her mother. This means Jane
- (a) loves her mother
 - (b) looks like her mother
 - (c) hates her mother
- 75 I can't get my Safari Course Book. I will take
my Geography book as a substitute. This means
- (a) I will take my Geography book instead
 - (b) My geography book is better
 - (c) I hate my geography book
- 76 My father seemed cruel but in reality he is
very kind.
- (a) in fact he is kind
 - (b) these days he is kind
 - (c) to other people he is kind
- 77 John replaced Tom in the football
- (a) Tom was placed in the team
 - (b) John played instead of Tom
 - (c) John beat Tom during the football game

85

A statesman is

- (a) a man who belongs to the state
- (b) one of the leaders of a country
- (c) a stupid man

86

The army Headquarters are in Nairobi. This means

- (a) the head of the Army is in Nairobi
- (b) the ceiling of the army is in Nairobi
- (c) the main offices of the army are in Nairobi

87

To discourage somebody means

- (a) to make somebody lose hope
- (b) to make somebody lose courage
- (c) to refuse to carry somebody

88

An infant means

- (a) an animal
- (b) a young child
- (c) a coward

89

Cats lick milk with their

- (a) ears
- (b) tongue
- (c) feet

90

A cradle is used for

- (a) sitting on
- (b) on giving us light
- (c) putting babies in

91

To show hatred is to

- (a) to show a lot of love
- (b) dislike someone very much
- (c) pity others very much

92

Vanity means

- (a) pride
- (b) anger
- (c) happiness

93

To go on a tour means

- (a) to travel
- (b) to settle
- (c) to go for holidays

Appendix A(ii) Test B

NAME OF YOUR SCHOOL

YOUR CLASS

DID YOU GO TO NURSERY SCHOOL?

ARE YOU A BOY OR A GIRL

1. On Sunday I visit my friend. This means
 - (a) I play with him
 - (b) I go to see him at his home
 - (b) I write a letter to my friend

2. To keep something means
 - (a) to throw it away
 - (b) to like it
 - (c) not to let it go

3. We can only get into the house when the door is
 - (a) closed
 - (b) open
 - (c) locked

4. Onyango is a poor man. This means
 - (a) he is old
 - (b) he is happy
 - (c) he has no money

5. The cup is full of milk. This means
 - (a) we can add more milk in the cup
 - (b) there is nothing in the cup
 - (c) there is no space in the cup for more milk

6. We can eat it when we are hungry
 - (a) medicine
 - (b) bread
 - (c) water

7. At this time it is dark and we go to bed to sleep
- (a) morning
 - (b) night
 - (c) afternoon
8. When I go home my mother will me to the shop to buy salt
- (a) ask
 - (b) tell
 - (c) send
9. To stop walking means
- (a) to go on walking
 - (b) to stand still
 - (c) to walk fast
10. Wait for your friend. This means
- (a) leave him
 - (b) do something for him
 - (c) do not go till he comes
11. This is the name of a colour
- (a) dress
 - (b) black
 - (c) book
12. Your home is
- (a) where you and your family live
 - (b) where your teacher and his family live
 - (c) where your friend lives
13. What comes out when you cut your fingers?
- (a) water
 - (b) blood
 - (c) red

14. What tells us what time it is?
(a) water
(b) minutes
(c) clock
15. The of sugar is five shillings per kilogram
(a) prize
(b) amount
(c) price
16. A number of objects arranged in a line is called a
(a) circle
(b) row
(c) group
17. Which of these words tells us the shape of an object?
(a) brown
(b) round
(c) heavy
18. We see smoke when
(a) there is fire
(b) it is raining
(c) it is dark
19. To tear something means to
(a) make a hole in it
(b) wash it
(c) to lift it
20. A group of people is called
(a) a herd
(b) a cloud
(c) a crowd

21. Small babies drink milk instead of tea.
This means
(a) they drink milk and tea
(b) they drink milk only and no tea
(c) they do not drink milk or tea
22. The children are quite happy. This means
(a) they are happy and silent
(b) they are completely happy
(c) they are not happy
23. To offer something means
(a) to ask for something
(b) to buy something
(c) to give something
24. It is usual for pupils to talk in class. This means
(a) it is wrong for pupils to talk in class
(b) it is common for pupils to talk in class
(c) it is good for pupils to talk in class
25. My mother is busy in the kitchen. This means
(a) she is resting in the kitchen
(b) she is sleeping in the kitchen
(c) she is working in the kitchen
26. I looked for my pen in vain. This means
(a) I looked for it in the blood
(b) I looked for it but did not find it
(c) I felt pain when looking for it
27. I tremble when I see the teacher with a stick.
This means
(a) I start crying
(b) I start shaking
(c) I have trouble

28. We reserved the food for the visitors. This means we
- (a) prepared the food for the visitors
 - (b) kept the food for the visitors
 - (c) served the food for the visitors
29. I do not want any more food. I am satisfied. This means
- (a) I am sick
 - (b) I am not happy
 - (c) I have had enough food
30. The little girl is lovely. This means she
- (a) loves me
 - (b) is beautiful
 - (c) is loved by everyone
31. It is likely to rain in the afternoon. This means
- (a) I would like it to rain in the afternoon
 - (b) It will probably rain in the afternoon
 - (c) It is impossible for the rain to fall in the afternoon
32. The rain will delay the bus. This means that the bus will
- (a) have an accident
 - (b) be very dirty
 - (c) be late in coming
33. To combine two things means
- (a) to collect them
 - (b) to compare them
 - (c) to put them together
34. I will attend the meeting. This means I will
- (a) go to the meeting
 - (b) arrange the meeting
 - (c) fight at the meeting

35. Ancient means
- (a) very narrow
 - (b) very old
 - (c) very clean
36. An artist is someone who
- (a) cooks
 - (b) draws pictures
 - (c) travels
37. My dress is cheap. This means it is
- (a) beautiful
 - (b) costs much
 - (c) costs little
38. To employ somebody means to
- (a) give him work to do
 - (b) teach him something
 - (c) do something for him
39. To murder someone is to
- (a) like him
 - (b) kill him
 - (c) hate him
40. A stranger is
- (a) someone you do not know
 - (b) a very good friend of yours
 - (c) some one you know well
41. To purchase something is to
- (a) sell it
 - (b) buy it
 - (c) give it away

42. A sailor travels by
(a) aeroplane
(b) car
(c) ship
43. To reveal something is to
(a) hide it
(b) show it
(c) steal it
44. To whisper is
(a) to talk loudly
(b) to cry
(c) not to talk loudly
45. A bitter thing is something which is
(a) sweet
(b) not sweet
(c) clean
46. Pupils use desks for
(a) writing on
(b) sleeping on
(c) cooking on
47. To scatter things is to
(a) move them to different places
(b) bring them together
(c) hide them
48. To search for something means to
(a) look for it
(b) give it away
(c) buy it
49. Your companion is one who
(a) hates you
(b) stays with you
(c) looks like you

42. A sailor travels by
(a) aeroplane
(b) car
(c) ship
43. To reveal something is to
(a) hide it
(b) show it
(c) steal it
44. To whisper is
(a) to talk loudly
(b) to cry
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45. A bitter thing is something which is
(a) sweet
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46. Pupils use desks for
(a) writing on
(b) sleeping on
(c) cooking on
47. To scatter things is to
(a) move them to different places
(b) bring them together
(c) hide them
48. To search for something means to
(a) look for it
(b) give it away
(c) buy it
49. Your companion is one who
(a) hates you
(b) stays with you
(c) looks like you

50. My pen has disappeared. This means
- (a) it has got lost
 - (b) it is broken
 - (c) it has no ink
51. An enormous thing is one which is
- (a) friendly
 - (b) very big
 - (c) funny
52. To quit a place means
- (a) to keep quiet
 - (b) to clean it
 - (c) to leave the place
53. A crack is
- (a) a hole
 - (b) an insect
 - (c) a bird
54. The cruel people are those who are
- (a) friendly
 - (b) bad
 - (c) happy
55. My father's income is 300/=. This means my father
- (a) comes in with 300/=
 - (b) earns 300/=
 - (c) spends 300/=
56. I cannot see properly. This means I cannot see
- (a) clearly
 - (b) any thing
 - (c) the house

57. The dog is fierce. This means it is
(a) dying
(b) brave
(c) glorious
58. The thief hid himself in the bush. This means the thief
(a) slept in the bush
(b) stayed in the bush so that nobody could see him
(c) kept the stolen things in the bush
59. A brilliant child is one who is
(a) obedient
(b) clever
(c) beautiful
60. The man was innocent. This means
(a) he was very old
(b) he did nothing wrong
(c) he was very strong
61. Poison is something that can
(a) make you sick
(b) make you happy
(c) make you rich
62. My work has shown some improvement. This means my work has become
(a) worse
(b) better
(c) more untidy
63. To conceal something means to
(a) hide it
(b) tear it
(c) give it to somebody

64. A purse is used for
(a) carrying money
(b) carrying school books
(c) carrying food
65. To dispose of something is to
(a) throw it away
(b) like it
(c) buy it
66. To persuade somebody means to make somebody
(a) afraid
(b) pleased
(c) believe
67. A remarkable story is one which is
(a) interesting
(b) good to mark
(c) long
68. To distinguish between two things is to
(a) tell the difference between them
(b) like them
(c) give them away
69. Our vacation will start in April. This means
(a) examinations will start in April
(b) holidays will start in April
(c) the rains will start in April
70. To stop means
(a) to stand still
(b) to hide
(c) to bend down
71. Our rulers are kind people. This means
(a) our brothers are kind
(b) our leaders are kind
(c) those who draw lines are kind

72. I will contact you. This means I will
- (a) see you
 - (b) employ you
 - (c) beat you
73. Mankind means
- (a) a kind man
 - (b) all people
 - (c) criminals
74. My mother was discharged from the hospital.
This means
- (a) She was taken to the hospital
 - (b) she was not charged any money in the hospital
 - (c) she came out of the hospital
75. Jane resembles her mother. This means Jane
- (a) loves her mother
 - (b) is like her mother
 - (c) hates her mother
76. My father seemed cruel but in reality he is very kind. This means
- (a) in fact he is kind
 - (b) these days he is kind
 - (c) he is kind to other people
77. John replaced Tom in the football team. This means
- (a) Tom was placed in the team
 - (b) John played instead of Tom
 - (c) John beat Tom during the football game
78. Donkeys pull
- (a) cats
 - (b) people
 - (c) carts

79. To offend is to
- (a) to offer something
 - (b) to make somebody angry
 - (c) to like somebody
80. To carve something is
- (a) to stop it from being straight
 - (b) to make something from wood
 - (c) to like something
81. To shriek is to
- (a) shout
 - (b) talk
 - (c) shiver
82. To know how to read is of primary importance. This means knowing how to read is
- (a) of little importance
 - (b) of great importance
 - (c) only for primary school pupils
83. A Statesman is
- (a) one who belongs to the state
 - (b) one of the leaders of the country
 - (c) a stupid man
84. The army headquarters are in Nairobi. This means
- (a) the head of the army is in Nairobi
 - (b) the guns of the army are in Nairobi
 - (c) the main offices of the army are in Nairobi.
85. To discourage somebody is
- (a) to give someone courage
 - (b) to make him lose hope
 - (c) to refuse to carry him

86. An infant is
(a) an animal
(b) a young child
(c) a coward
87. Cats lick milk with their
(a) ears
(b) tongue
(c) feet
88. A cradle is used for
(a) sitting on
(b) giving us light
(c) putting babies
89. A thief is someone who
(a) steals
(b) works
(c) teaches
90. The chin is part of your
(a) leg
(b) hand
(c) face
91. A fisherman is one who works
(a) in the field
(b) in the house
(c) in water
92. Agony means
(a) happiness
(b) pain
(c) pride
93. To consume something is to
(a) eat it
(b) hide it
(c) buy it

94. A butcher is a man who sells
(a) beans
(b) meat
(c) dresses
95. A fox is
(a) an animal
(b) a person
(c) something made of wood
96. To cling to something means
(a) to hold something firmly
(b) to go near something
(c) to look at something
97. A speaker is someone who
(a) is good to the people
(b) talks to the people
(c) flatters people
98. To show hatred is to
(a) show a lot of love
(b) dislike someone very much
(c) to pity other people very much
99. Vanity means
(a) pride
(b) happiness
(c) anger
100. To go on a tour means
(a) to settle
(b) to go to hospital
(c) to go on safari

Appendix A (iii) Test C

Below are a number of questions. Read each question carefully and choose the answer which gives the correct meaning of the word underlined. When you choose the correct answer, put a tick (✓) next to it. ONLY ONE tick (✓) must be put for any question. Below are a few examples.

One of them is worked out for you.

The other ones will be done with the help of the teacher.

IF YOU ARE NOT SURE OF THE ANSWERS DO NOT GUESS

1. We use pens for
 - (a) eating
 - (b) writing ✓
 - (c) drinking

2. The teacher uses _____ for writing on the blackboard.
 - (a) chalk
 - (b) pencil
 - (c) stick

3. Chairs are used for
 - (a) eating with
 - (b) sleeping on
 - (c) sitting on

YOUR SCHOOL : _____

YOUR CLASS : _____

ARE YOU A BOY OR A GIRL ? _____

DID YOU GO TO NURSERY SCHOOL? _____

1. To keep something means
 - (a) to give it away
 - (b) to like it
 - (c) not to let it go

2. To be poor means
 - (a) to have no money
 - (b) to be old
 - (c) to be happy

3. To stop walking means
 - (a) to stand still
 - (b) to go on walking
 - (c) to run away

4. To wait for your friend means
 - (a) to leave him
 - (b) to do something for him
 - (c) not to go until he comes

5. This is the name of colour
 - (a) dress
 - (b) black
 - (c) book

6. Your home is
 - (a) where you and your family live
 - (b) where your friend lives
 - (c) where you go to school

7. A garden means
 - (a) a house
 - (b) a dress
 - (c) a shamba

8. A new dress is a dress which is
 - (a) very old
 - (b) not old
 - (c) white

9. To watch something is to
- (a) look at it
 - (b) like it
 - (c) keep it
10. We use the fire for
- (a) sitting on
 - (b) writing with
 - (c) cooking
11. My pen is lost. This means
- (a) it is a good one
 - (b) I do not know where it is
 - (c) it is in the house
12. We use paper for
- (a) writing on
 - (b) sitting on
 - (c) walking on
13. A kind person is one who is
- (a) liked by others
 - (b) bad to others
 - (c) good to others
14. To drop something is to
- (a) like it
 - (b) let it fall down
 - (c) take it away
15. To leave is to
- (a) go away
 - (b) sit down
 - (c) stand up
16. To increase something is to
- (a) take it away
 - (b) give it away
 - (c) add to it

17. To start is to
(a) end
(b) begin
(c) answer
18. Different means
(a) not the same
(b) not good
(c) not happy
19. To change your name is to
(a) like your name
(b) have no name
(c) get a different name
20. Young means
(a) old
(b) not old
(c) poor
21. To visit a friend means to
(a) go to see him at his home
(b) to write a letter to him
(c) to play with him
22. What comes out when you cut your fingers?
(a) red
(b) water
(c) blood
23. We see smoke when
(a) it is raining
(b) there is fire
(c) it is dark

24. A group of people is called
(a) a crowd
(b) a herd
(c) a cloud
25. To tear something means to
(a) give it away
(b) lift it
(c) make a hole
26. To offer something means
(a) to buy something
(b) to give something
(c) to ask for something
27. To be busy means to be
(a) working
(b) sitting
(c) sleeping
28. To attempt is to
(a) stand up
(b) sing
(c) try
29. To seek something is to
(a) like it
(b) look for it
(c) hurt it
30. To prepare is to
(a) make ready
(b) go to sleep
(c) run away
31. Pretty means
(a) bad
(b) kind
(c) beautiful

32. Which of these words tells us the shape of an object?
- (a) brown
 - (b) round
 - (c) heavy
33. Simple means
- (a) easy
 - (b) hard
 - (c) thin
34. A job means
- (a) a dress
 - (b) a good thing
 - (c) work
35. What do we use for walking?
- (a) head
 - (b) legs
 - (c) ears
36. To obtain something means
- (a) to get it
 - (b) to give it away
 - (c) to lose it
37. Your knee is part of your
- (a) hand
 - (b) face
 - (c) leg
38. To be certain is to be
- (a) afraid
 - (b) sure
 - (c) happy
39. A market is where people
- (a) sell and buy things
 - (b) go to sleep
 - (c) go to school

40. We use a chair for
(a) walking on
(b) sleeping on
(c) sitting on
41. A farmer works in the
(a) lake
(b) shamba
(c) house
42. To hurry is to be
(a) quick
(b) slow
(c) ill
43. To settle is to
(a) die
(b) go away
(c) stay
44. Single means
(a) many
(b) one
(c) nothing
45. I looked for my pen in vain. This means
(a) I looked for it in the blood
(b) I felt pain when looking for it
(c) I looked for it but did not find it
46. To tremble is to
(a) cry
(b) shake
(c) have trouble

47. To reserve something is to
- (a) keep it
 - (b) serve it
 - (c) prepare it
48. To be satisfied is
- (a) to be sick
 - (b) to be sad
 - (c) to have had enough
49. A lovely person is a person
- (a) who is loved by everyone
 - (b) who is beautiful
 - (c) who loves me
50. It is likely to rain in the afternoon. This means
- (a) it will probably rain in the afternoon
 - (b) it is impossible for the rain to fall in the afternoon.
 - (c) I would like it to rain in the afternoon
51. To delay is to
- (a) be very dirty
 - (b) have an accident
 - (c) be late in coming
52. To combine two things means
- (a) to collect them
 - (b) to put them together
 - (c) to compare them
53. To attend a meeting means to
- (a) go to the meeting
 - (b) arrange the meeting
 - (c) fight at the meeting

54. Ancient means
(a) very clean
(b) very new
(c) very old
55. An artist is someone who
(a) cooks
(b) draws pictures
(c) travels
56. To scatter things is to
(a) hide them
(b) bring them together
(c) move them to different places
57. To search for something means to
(a) look for it
(b) give it away
(c) buy it
58. Your companion is one who
(a) hates you
(b) looks like you
(c) stays with you
59. My pen has disappeared. This means
(a) it is broken
(b) it has got lost
(c) it has no ink
60. We eat it when we are hungry
(a) bread
(b) water
(c) ink
61. To choose means to
(a) beat
(b) kill
(c) select

69. Tender means
(a) soft
(b) hard
(c) poor
70. Where do we go when we are ill?
(a) market
(b) school
(c) hospital
71. To admire something is to
(a) hate it
(b) like it
(c) kill it
72. To approach something is to
(a) go near it
(b) go away from it
(c) hide from it
73. To address people means
(a) to beat them
(b) to take their dresses
(c) to talk to them
74. To cease is to
(a) start
(b) stop
(c) take
75. To create is to
(a) make
(b) spoil
(c) hate
76. Powerful means
(a) beautiful
(b) weak
(c) strong

77. Your property means
(a) what you read in school
(b) what belongs to you
(c) what you do not like
78. Similar means
(a) same
(b) different
(c) simple
79. To consent is to
(a) disagree
(b) send someone
(c) agree
80. Dozen means
(a) one-object
(b) twelve objects
(c) ten objects
81. Entire means
(a) all
(b) to get in
(c) nothing
82. To aid is to
(a) ask
(b) kill
(c) help
83. False means
(a) true
(b) not true
(c) order
84. To recall is to
(a) remember
(b) see
(c) forget

85. The man was innocent. This means
(a) he was very old
(b) he did nothing wrong
(c) he was very strong
86. A brilliant child is one who is
(a) obedient
(b) beautiful
(c) clever
87. An enormous thing is one which is
(a) friendly
(b) very big
(c) funny
88. A crack is
(a) a hole
(b) an insect
(c) a bird
89. A fierce dog is one which is
(a) dying
(b) glorious
(c) brave
90. Cruel people are those who are
(a) very bad
(b) very friendly
(c) very happy
91. Poison is something that can
(a) make you sick
(b) make you happy
(c) make you rich
92. A purse is used for
(a) carrying money
(b) carrying school books
(c) carrying food

93. To conceal something means to

- (a) hide it
- (b) tear it
- (c) give it away

94. To improve something is to make it

- (a) worse
- (b) untidy
- (c) better

Appendix A(iv) The pictorial part of Test C shown in Appendix A(iii) above

Below are a number of pictures. Look at each picture carefully. Then read the sentences given below each picture. Choose the correct answer and put a tick (✓) next to the correct answer. ONLY ONE TICK must appear for each question. Below are two examples. One is done for you. You will do the other one with the help of the teacher.

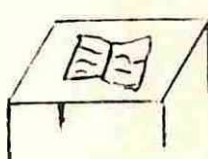
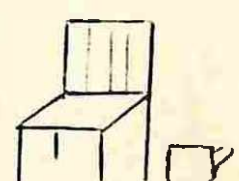

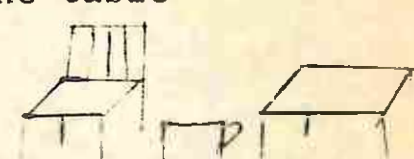
IF YOU DO NOT KNOW THE ANSWER DO NOT GUESS.

YOUR SCHOOL : _____

YOUR CLASS. : _____

ARE YOU A BOY OR A GIRL? _____

DID YOU GO TO NURSERY SCHOOL? _____

<p>The book is the table</p> <p>a) on ✓ b) near c) under</p> 	<p>The cup is the chair</p> <p>a) over b) under c) near</p> 
<p>1</p> <p>The cup is the table</p> <p>a) on b) near c) under</p> 	<p>2</p> <p>The cup is the chair and the table</p> <p>a) under b) between c) on</p> 

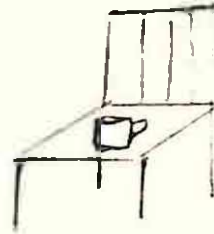
3



The bird is flying
..... the house

- a) over
- b) under
- c) at

4



The cup is the
chair

- a) on
- b) over
- c) under

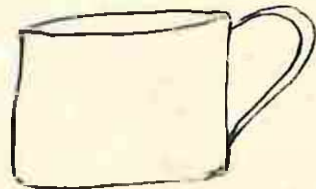
5



The cup is

- a) far from the book
- b) on the book
- c) near the book

6



There is nothing
the cup

- a) of
- b) in
- c) at

APPENDIX B1. Schools Used in the Studyi) Schools Used for the Screening Test 'A'

urban - a) Matende
b) Mahiakalo

rural - a) Kakunga
b) Keveye

ii) School Used for Test 'B'

a) Ndani

iii) Schools Used for Test 'C'

urban - a) Kakamega
b) Bukhulunya
c) Maraba
d) Musaa
e) Mwiya

rural - a) Munzatsi
b) Mumias District Education Board
(D.E.B.)
c) Kakoyi
d) Shikoti
e) Chandumba

II. Class textbooks used

- a) New Peak Reader. 1964 Special Centre :
Ministry of Education, Nairobi: Oxford
University Press.
- b) Reading in Action. 1964 Special Centre.
Ministry of Education, Nairobi: Oxford
University Press.
- c) Safari Course Book I. 1968 Ministry of
Education, Kenya, Nairobi: Jomo Kenyatta
Foundation.